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LAND USE PROGRAMS IN CANADA

YUKON TERRITORY

JANUARY 1979

D.K. REDPATH
LANDS DIRECTORATE
ENVIRONMENT CANADA



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ERRATA

Page 77, Footnote 19 - "March 32", should read "March 23".

Page 93, Table 6 - the heading "RURAL" refers to the three right hand columns only.

- Rural Farm population, 1976 - "5^b" should read "<5^b".

Page 145, Paragraph 2, line 8 - remove "spaced so".

Page 149, Line 1 - should read "a split in responsibility between the federal and territorial governments;"

Page 193, Footnote 1 - add "1976-1977 Government Activities in the North, pp. 99-109".

Page 203, Paragraph 3, line 12 - "recorder" should read "recorded".

Page 241, Paragraph 2, line 9 - "Protecting" should read "Protection".

Page 246, Paragraph 3, line 1 - "repeats" should read "repeals".

Page 294, Line 1 - "Commission" should read "Commissioner"

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MAP

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LIST OF ABBREVIATIONS

ACND	Advisory Committee on Northern Development
ARC	Agreements for Recreation and Conservation
BLT	Block Land Transfer
BNA	British North America
CARC	Canadian Arctic Resources Committee
CMHC	Central Mortgage and Housing Corporation
COPE	Committee for Original Peoples' Entitlement
CYI	Council for Yukon Indians
DIAND	Department of Indian Affairs and Northern Development
DOE	Department of the Environment
DPW	Department of Public Works
EIS	Environmental Impact Statement
EMR	Department of Energy, Mines and Resources
H&W	Department of Health and Welfare
IEE	Initial Environmental Evaluation
LID	Local Improvement District
MOT	Ministry of Transport
NCPC	Northern Canada Power Commission
RMO	Resource Management Officer
RSCC	Regional Screening and Coordinating Committee
YANSI	Yukon Association of Non-Status Indians
YHC	Yukon Housing Corporation
YNB	Yukon Native Brotherhood
YTG	Yukon Territorial Government

ACKNOWLEDGEMENTS

Appreciation is extended to those who offered assistance in various forms during the preparation of this report. Special thanks is extended to Lissa Decker who prepared the illustrations and to Neville Ward who assisted throughout the study, especially in arranging for typing, editing and printing of the report.

PHOTOGRAPHS

By the author.



Gold dredge tailings near Dawson



Gas drilling site, southeast Yukon



Indian salmon traps, Klukshu River



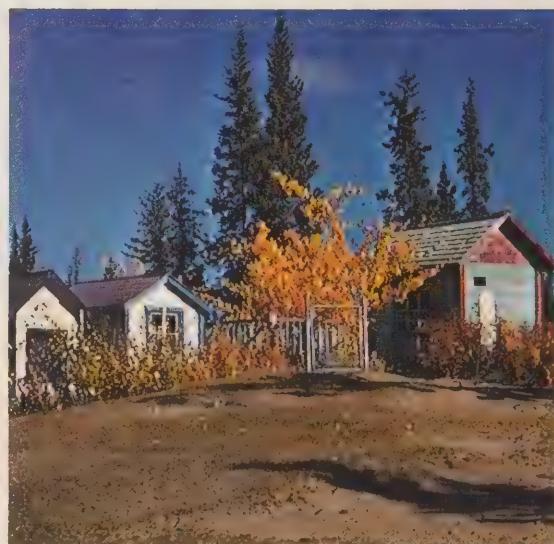
Fishing, East Blackstone River



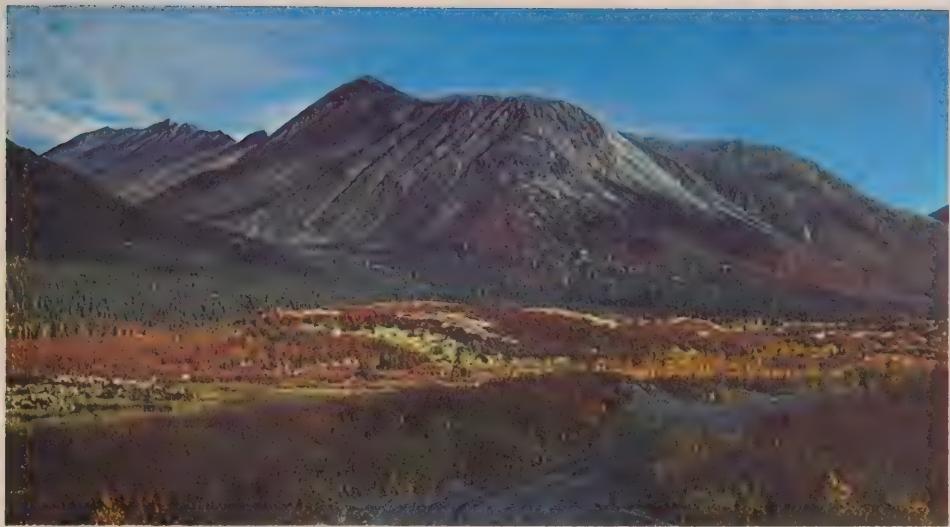
Camping, South MacMillan River



Dawson



Indian spirit houses, Champagne



Along North Canol Road near Yukon — Northwest Territories border



Along the Dempster Highway near North Fork Pass



Donjek River



Yukon River at Dawson



Along South Canol Road near Lapie Lake

I. INTRODUCTION

Land use planning in Canada is a complex process to which many government departments and agencies contribute. This report on Yukon is the eleventh in a series encompassing each of the provinces and territories. The reports for the provinces have been completed and provide an overview of the land use planning process in Canada at the provincial level.

In this report, the roles of the federal and territorial agencies engaged in land use planning and/or land management in Yukon are outlined and the pertinent legislation is identified. In addition, concerns and issues regarding land use and land management are discussed. Data are presented in both imperial and metric units. The format of the reports is designed to allow the reader to refer to only specific topics if desired.

Chapter II provides general background information on Yukon, including a discussion of historical development, land ownership, native land claims, the administration of the land resource (including a brief outline of the organization of the Yukon territorial government), and an historical look at land uses in the territory. Chapter III describes the administration and management of land and land use in Yukon. Population, communities, land use planning and regional development are discussed in Chapter IV. Environmental programs are outlined in Chapter V. Chapters VI to XII discuss current government programs, relevant legislation, and trends within various land use sectors. These sectors are: agriculture; forestry; recreation; fish and wildlife; energy resources, mining and quarrying; transportation; and water. A summary and conclusion is presented in Chapter XIII.

The information presented in this report is based on discussions with federal and territorial officials and on reports that were made available to the author. Because the land use planning process is in a continuous state of change and refinement, the description in this study of its state in Yukon can be considered current only to January, 1979.

AREA

The Yukon Territory covers a total area of approximately 536 325 km² (207,076 mi.²) or just over 5% of Canada's land area.¹ Of this total, approximately 531 844 km² (205,346 mi.²) are land. Surface land uses in the territory are outlined in Table 1.

PHYSIOGRAPHY²

The physiography ranges from a coastal plain in the extreme north to the St. Elias Mountains in the southwest which contain numerous high peaks, including Mount Logan, the highest mountain in Canada and the second highest in North America (6 050 m or 19,850 ft. above sea level). Between these two extremes are extensive plateaus, lowland plains with little relief, and several mountain ranges. Two conspicuous northwest-southeast oriented fault lines (Tintina and Shakwak valleys) are evident. The present physiography was formed as a result of glaciation, erosion, solifluction and aeolian and volcanic ash distribution on the original mountainous terrain. These processes still operate, modifying or altering existing topographic features.

1 Statistics Canada, Canada Year Book 1976-77 Special Edition, pp. 32-33. There is currently some uncertainty as to the actual area of the territory. For example, officers of the Canadian Forestry Service in Victoria, B.C., developed and implemented Yukon RRAMS, an information retrieval system for renewable resource and management statistics. Using this system, in which area calculations are based on the Universal Transverse Mercator (UTM) grid system, the area of the Yukon Territory was computed to be 54 644 km² (20,712 mi.²) smaller than the commonly published area. However, unless otherwise indicated, all area calculations given in this report are based on the commonly published areas given in the Canada Year Book.

2 Based on E.T. Oswald and J.P. Senyk, Ecoregions of Yukon Territory, the section on "Description of the Yukon Territory," pp. 6-22.

MAP 1

The Yukon Territory

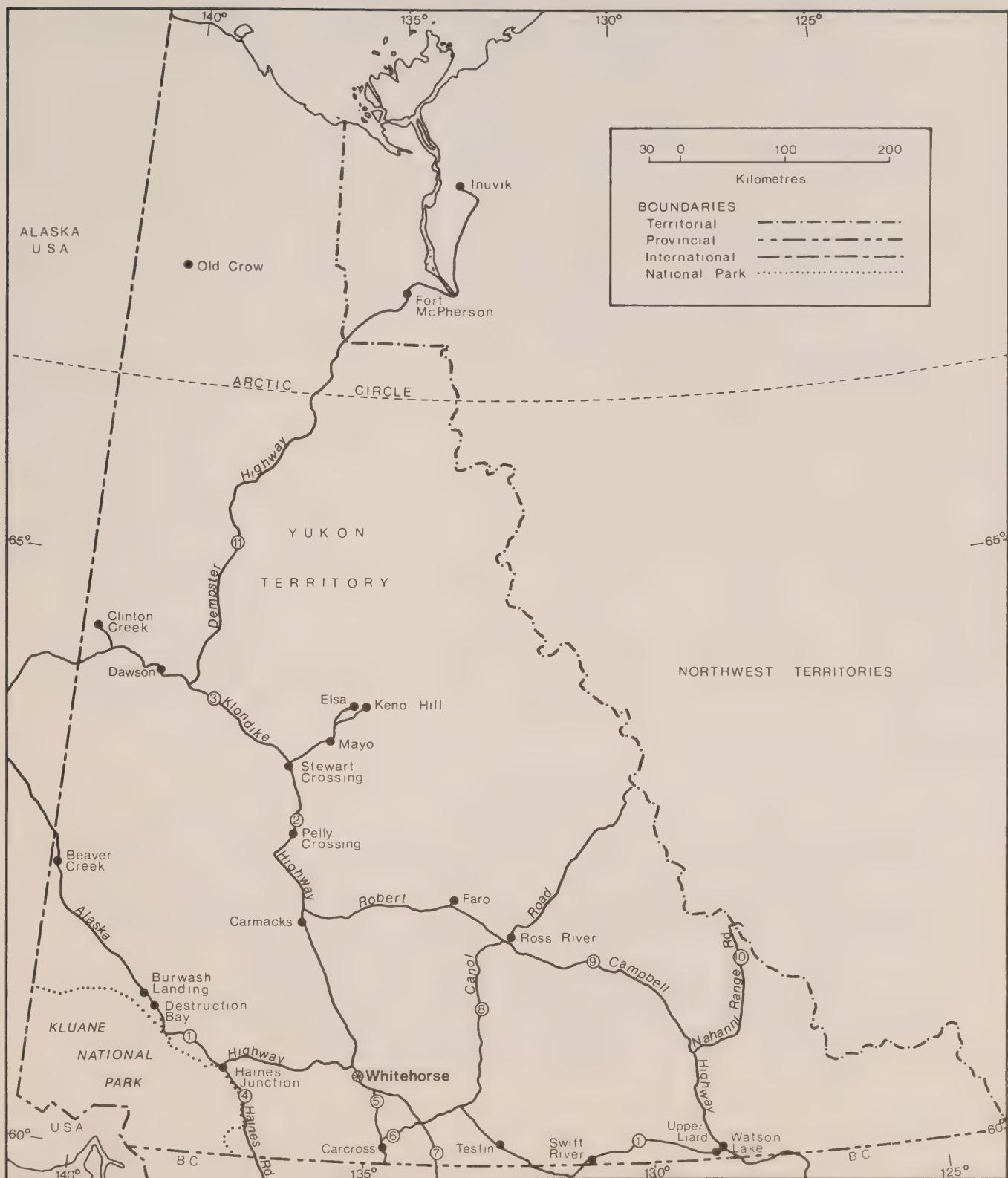


TABLE 1
SURFACE LAND USES IN YUKON

	Square Kilometres	Square Miles	Hectares (x 10 ³)	Acres (x 10 ³)	Percentage* of Total
TOTAL AREA a	536 325	207,076	53 632	132,528	100.0
Land Area	531 844	205,346	53 184	131,421	99.2
Water Area	4 481	1,730	448	1,107	0.8
AGRICULTURE b					
Total Area of Holdings	16	6	2	4	-
Improved Land	5	2	1	1	-
Unimproved land	11	4	1	3	-
FORESTRY c					
Productive and Unproductive	219 000	84,556	21 900	54,116	41.2 (40.8)
PARKS					
National d	22 015	8,500	2 201	5,440	4.1 (4.1)
Territorial e	-	-	-	-	-
OTHER LAND	290 813	112,283	29 081	71,861	54.7 (54.2)

* Percentages in brackets for Forestry, Parks and Other Land are for total area, other percentages for these categories are as percentage of total land area.

Sources:

- a Statistics Canada, Canada Year Book 1976-77 Special Edition, pp. 32-33 and 43.
- b Statistics Canada, 1976 Census of Canada, Vol.11 Agriculture, catalogue 96-800.
- c Fisheries and Environment Canada, Canadian Forestry Service, Forest Management Institute, National Forestry Statistics Survey, 1977.
- d Statistics Canada, Canada Year Book 1976-77 Special Edition, p. 43.
- e These are presently no Territorial Parks in existence, although a number of areas have been proposed for such purposes.

Parts of western and northern Yukon were not affected by Pleistocene glaciation. The topography and surface material of this unglaciated portion is largely the result of weathering of local bedrock, and subsequent aeolian and fluvial erosion and deposition. Included in this unglaciated portion is the Dawson area where the gold-bearing sediments remained undisturbed and served as the source of the famous Klondike gold rush.

One other feature common to northern landscapes is permafrost.³ In Yukon, permafrost is divided into two zones: the continuous zone in the north (generally north of the Arctic Circle) and the discontinuous zone in the south. Perennially frozen terrain results in recognizable surface features dependent on local climate, landform, topographic position, hydrology, vegetation, soil and rock type, snow cover and fire history.

WATERSHEDS⁴

Yukon is drained through six major watersheds (Map 2), each composed of several tributaries.

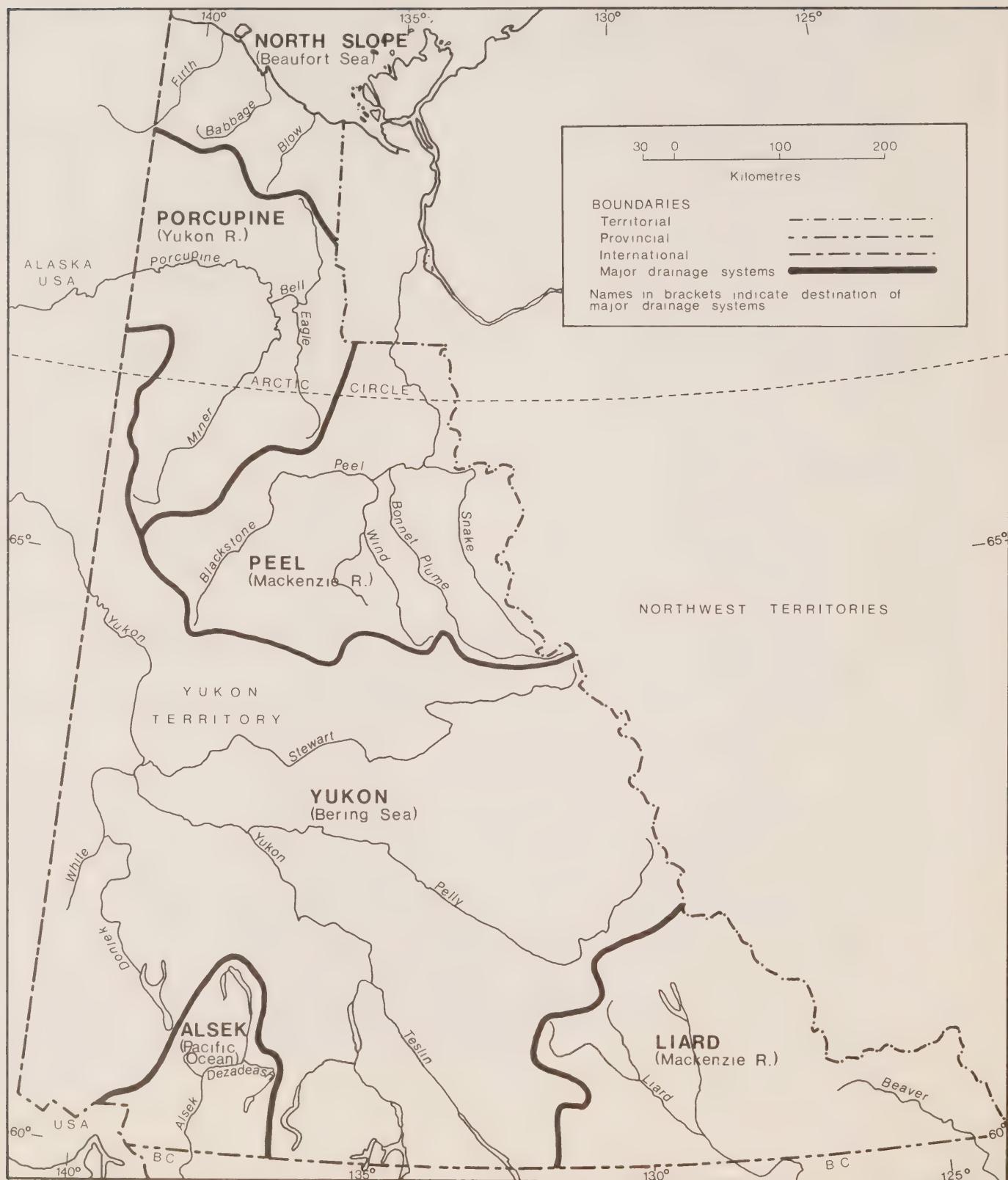
The southeast corner, comprising about 12% or 57 922 km² (22,364 mi.²) of Yukon is drained southward by the Liard River.

³ Defined as "...the thermal condition under which earth materials exist at a temperature below [0°C] 32°F continuously for a number of years." J.A. Pihlainen and G.H. Johnston, Guide to a Field Description of Permafrost for Engineering Purposes, Technical Memorandum 79, National Research Council Canada (October 1963), p. 5

⁴ Based on Oswald and Senyk, Ecoregions of Yukon Territory, pp. 8 and 14. Because that report utilized the smaller calculated area of Yukon (482 681 km² versus the commonly published area of 536 325 km²) the areas given in this section on watersheds will not add to the total area given in Table 1.

MAP 2

Major Drainage Systems in the Yukon Territory



The Aishihik Basin, the eastern portion of the St. Elias Mountains and the northwestern part of the Coast Mountains are drained to the south by the Alsek River, which crosses the extreme northwest corner of British Columbia and a portion of Alaska to enter the Gulf of Alaska. This watershed comprises about 4% or 19 302 km² (7,453 mi.²) of Yukon.

The Yukon River watershed comprises approximately 54% or 260 653 km² (110,638 mi.²) of the Yukon Territory and drains to the northwest. The Yukon River traverses Alaska to empty into the Bering Sea, a total length of over 3 680 km (2,285 mi.).

The Peel River watershed drains about 14% or 67 580 km² (26,093 mi.²) of Yukon, providing drainage for the main portion of the Wernecké Mountains, the northwestern portion of the Ogilvie Mountains, and the southwestern portion of the Richardson Mountains.

The Porcupine River watershed drains about 12% or 57 922 km² (22,364 mi.²) of Yukon, including the southern portion of the British Mountains, the western portion of the Richardson Mountains and the northeastern portion of the Ogilvie Mountains. The Porcupine River drains into the Yukon River at Fort Yukon, Alaska, and is actually a part of the Yukon watershed system. However, since the regional climate and physiography of the Porcupine River area is considerably different from that of the Yukon River watershed to the south, the two portions are treated as separate watersheds.

The remaining portion of Yukon, about 4% or 19 302 km² (7,453 mi.²), drains northward directly into the Beaufort Sea.

II. HISTORICAL CONTEXT

HISTORICAL DEVELOPMENT¹

The history of land use north of 60° has been considered as encompassing three epochs:²

- (i) the prehistoric period of hunters and food gatherers;
- (ii) the early fur trade;
- (iii) the industrial development of natural resources.

THE NATIVE PEOPLE

The Indians of North America migrated from Asia by a land bridge that once existed in the area of the Bering Strait. Most of these people probably traversed Yukon toward the interior. Archaeological research indicates Indian land use at Old Crow at least 30,000 years ago, at Kluane Lake 10,000 years ago, and at the Pelly River over 8,000 years ago. Three distinct cultural groups became established in Yukon: the Inuit (along the north coast), the Athapaskans in the interior, and the Tlingit in the southwest. Partly as the result of their total dependence upon the land for the basics of life, the land had a philosophical and religious meaning for native people of the pre-contact period. They never considered it in terms of private property.

¹ Based primarily on Kenneth M. Lysyk, Edith E. Bohmer, and Willard L. Phelps, Alaska Highway Pipeline Inquiry (July 29, 1977), pp. 11-14 and p. 84, and John Kennedy Naysmith, Land Use and Public Policy in Northern Canada (Department of Indian and Northern Affairs, Northern Policy and Program Planning Branch, 1975), pp. 1-59.

² Naysmith, Ibid., p. 2.

THE FUR TRADE

The fur trade in Yukon was from two directions: initially from the west with the Russians and others along the coast, and secondly from the east with the Hudson's Bay Company. That company sent Robert Campbell to find a large river that flowed westward. In 1842 he established Fort Frances, the first Hudson's Bay Company post in Yukon. In 1848 he built Fort Selkirk near the junction of the Pelly and Yukon rivers. In northern Yukon at about the same time, John Bell, another Hudson's Bay Company employee, travelled from the Mackenzie Delta to the Porcupine River and down it to the Yukon River.

In 1847 Alexander Murray established Fort Yukon at the confluence of the Porcupine and Yukon rivers. In subsequent years the fur trade expanded and a number of new trading posts were established: Fort Reliance in 1874 (located about six miles below the present site of Dawson), at the mouth of the Stewart River and Forty Mile River, Fort Selkirk, and on the Sixty Mile River. The fur trade became the basis of economic life for the northern Indians and their life style changed from one of self-sufficiency to a hunting-trapping-trading relationship.

THE GOLD RUSH

In the 1870s and 1880s the first prospectors in search of gold reached the Yukon River valley. It has been estimated that in 1885 there were 1,000 men in the Forty Mile area.³ The discovery of gold at Bonanza (Rabbit) Creek, near Dawson, in 1896 led to the famous Klondike gold rush, the one historical event that everyone associates with Yukon.

The majority of the gold seekers followed old Indian trading routes across the mountain passes between tidewater (the Skagway area of Alaska) and Bennett, B.C. and then followed the Yukon River to Dawson.

3 Naysmith, Ibid., p. 47 quoting David R. Morrison, The Politics of the Yukon Territory 1898-1909, Toronto: University of Toronto Press, 1968.

It has been estimated that 100,000 people set out on the trail to the Klondike; 30,000 to 40,000 actually reached Dawson. About 15,000 to 20,000 searched for gold and only 4,000 actually found any. A few hundred discovered gold in sufficient quantities to call themselves rich while only a handful managed to retain their wealth.⁴

In 1899, three years after the discovery of gold that led to the great Klondike stampede, gold was discovered on the beach at Nome, Alaska. This caused a new stampede and marked the end of the Klondike gold rush.

The gold rush also heralded the beginning of many of the land use activities we know today, such as mining, and led to the construction of the White Pass & Yukon Railway which was completed between Skagway and Whitehorse in 1900.

The gold rush population had gone by 1910. In the period 1910 to 1940, Yukon, in comparison to other parts of northern Canada, had developed a comparatively good system of communication and transportation and had a number of small, permanent settlements. The population was more or less stable, and renewable resources were prominent in the Yukon economy.

HIGHWAYS AND PIPELINES

Another boom in Yukon population and development, which began in the early 1940s, was related to the war effort. Construction began on the Alaska Highway, the airstrips of the North West Staging Route, the Canol Road and the Canol Pipeline. Whitehorse, one of the main distribution centres for manpower and materials, experienced a population explosion from about 700 to 40,000.⁵

4 Pierre Berton, Klondike: The Last Great Gold Rush 1896-1899, revised edition 1972, p. 396.

5 There appears to be some question as to this latter figure; Lysik, Bohmer and Phelps in the Alaska Highway Pipeline Inquiry, p. 13, indicate a figure of 40,000; Jim Lotz, Northern Realities: Canada-U.S. Exploitation of the Canadian North (1971), p. 54, indicates a figure of over 20,000.

This resulted in a changed population distribution. The former pattern of settlement which had followed the main regional waterways, moved to new locations at crossroads and highway intersections. The road had other effects: it opened up the Kluane region in the southwest and established Whitehorse as the site of an oil refinery and focal point for several pipelines. In 1953 the capital was moved from Dawson to Whitehorse. New roadside settlements were established. Today 80% of the Yukon population lives along the Alaska Highway and every Yukon settlement, except Old Crow, can be reached by road. The construction of the Alaska Highway marked the beginning of a permanent non-Indian majority in the Yukon population and the road system set the stage for future changes.

RECENT DEVELOPMENTS

A short period of stagnation followed the boom associated with the highway. In the early 1950s the federal government supported mining and further road construction in Yukon. In the 1960s additional mines were brought into production.

The Yukon economy today is heavily dependent on the extractive industry (e.g. it is estimated that the Cyprus Anvil Mine near Faro constitutes 40% of the Yukon economy).⁶ Both territorial and federal governments play a pervasive role in the economy. The communication and transportation systems in Yukon are superior to those of other areas in northern Canada. The population is more stable and the economy more diversified.

POPULATION FLUCTUATIONS⁷

Over the past 80 years, the population of Yukon has experienced tremendous fluctuations (Table 2). During the gold rush, the population

⁶ Lysyk, Bohmer, and Phelps, Alaska Highway Pipeline Inquiry, p. 64.

⁷ Based primarily on Lysyk, Bohmer, and Phelps, Alaska Highway Pipeline Inquiry, pp. 17 and 84.

TABLE 2

POPULATION OF THE YUKON TERRITORY, 1901 - 1976

Year	Population
1901.....	27,219
1911.....	8,512
1921.....	4,157
1931.....	4,230
1941.....	4,914
1951.....	9,096
1956.....	12,190
1961.....	14,628
1966.....	14,382
1971.....	18,388
1976.....	21,836

Source:

Census of Canada

increased from 5,000 to 40,000 almost overnight. At the height of the gold rush Dawson had a population of over 30,000 (more than the present population of Yukon) and was the largest North American city west of Winnipeg and north of San Francisco. In 1901 the population of Yukon was 27,219. By 1911 the population had declined to approximately 8,500. It declined further and remained relatively stationary at about 4,000 to 5,000 until 1941, when the Alaska Highway construction began. The population nearly doubled between 1941 and 1951. Mineral exploration and government-assisted construction activities aided in raising the population to over 14,000 in 1961. From 1961 to 1966 there was little change in the population because of military personnel and federal employees returning south. Over the next 10 years there was a growth in population brought about by an increase in the number of federal and territorial government employees and rapid expansion of the mining industry. The 1976 population was 21,836, with 61% (13,311) residing in Whitehorse. In 1978, out of a population of 23,306, 15,455 people lived in Whitehorse.⁸

The population fluctuations are almost entirely due to changes in size of the white population. The Yukon Indian population has remained relatively stable at an estimated 6,000.⁹

Unlike most of the north, in Yukon there has been a pattern of intermarriage which has resulted in a large population of non-registered Indians, as defined in the Indian Act. It is estimated that up to one-third of the Indians in Yukon are non-registered Indians.¹⁰

8 Yukon Health Care Records, July 1978.

9 Personal communication from the Land Claims Administrator, Government of Yukon indicates that there is an estimated 4,500 - 5,000 persons of Indian descent in Yukon. This estimate is based on the number of Indian persons who have been registered for the Yukon Indian land claim.

10 Personal communication, Land Claims Administrator, Government of Yukon, September 29, 1978.

LAND OWNERSHIP

The total land and water area of Yukon is 536 325 km² (207,076 mi.²). See Table 3. Virtually all of the land (99.8%) is under the control, management and administration of the federal government and is subject to disposal only by the federal government. The territorial government is responsible for the control, management and administration of an estimated 0.2%, located primarily around established communities. Very little land is owned privately (approximately 0.03%). The federal Crown has, however, issued surface and subsurface leases for extensive areas. Preliminary figures provided by the Land Management Division, DIAND indicate that as of December 1978 there was a total of 983 active surface leases and 29 agreements for sale covering an area of 21 496 ha (53,117 a.) in Yukon.

INDIAN LAND CLAIM¹¹

Because of conflicts arising between miners and traditional Indian use of land, special tracts of land were set aside for exclusive Indian use around the turn of the century in the vicinity of Lake Laberge, 129.5 ha (320 a.) and near the junction of the Stewart and McQuesten rivers, 129.5 ha (320 a.). Additional areas were set aside for Indian reserves.

Today there are six Indian reserves in Yukon, comprising a total of 500 ha (1,235 a.), as defined by the Indian Act. In Yukon, Indian reserves do not play as important a role for Yukon Indians as they do for Indians in southern Canada. For example, of the six official reserves, only two have a substantial number of residents. Two others

¹¹ Based on Lysyk, Bohmer and Phelps, Alaska Highway Pipeline Inquiry, pp. 105-121; Naysmith, Land Use and Public Policy in Northern Canada, pp. 49-50; "A Comprehensive Look at Land Claims", Yukon News, May 17, 1978; and Wally Gryba, senior federal land claims representative, Yukon, speech delivered to Yukon Fish and Game Association, May 6, 1978.

TABLE 3
YUKON LAND TENURE a

TYPE	AREA				
	Square Kilometres	Square Miles	Hectares (x 10 ³)	Acres (x 10 ³)	Percent
Privately Owned Land (or land in the process of being alienated from the Crown)	168	65	17	42	-
Federal Crown Land (other than National Parks and Indian Reserves)	513 194	198,145	51,319	126,813	95.7
National Parks	22 015	8,500	2,201	5,440	4.1
Indian Reserves b	5	2	1	1	-
Commissioner's Lands	943	364	94	233	0.2
TOTAL	536 325	207,076	53 632	132,528	100.0

a Includes water areas.

b Includes only lands specifically set aside as Indian reserves as defined in the Indian Act. There are other lands that have been withdrawn from disposal or set aside for Indian use. As of 1974, 74 areas of land had been identified for Indian use and set aside or reserved (Order-in-Council transfer, notation in departmental records, etc.). These lands comprise over 1 036 km² (400 mi.²) and have been set aside for various purposes including residential areas, grazing areas, and traditional camping and hunting areas. Since 1974, a number of small parcels of land have been added to this total.

Sources:

Statistics Canada, Canada Year Book 1976-77 Special Edition, p. 43.

have some residents. As far as can be determined, no Indian band in Yukon passes bylaws under the Indian Act.¹²

Of more importance to Indians and to land management are other lands that have been withdrawn from disposal or set aside for Indian use. As of 1974, 74 areas of land had been identified for Indian use and either set aside or reserved (Order-in-Council transfer, notation in departmental records, etc.). These lands comprise over 1 036 km² (400 mi.²) and have been set aside for various purposes including residential areas, grazing areas, and traditional camping and hunting areas.¹³ Since 1974, a number of small parcels of land have been added to this total.

BACKGROUND TO THE INDIAN LAND CLAIM IN YUKON

Various acts and treaties of colonial, provincial and national legislatures, dating back to the 1700s, recognized that native people, as prior residents of the land, had certain rights in relation to that land. Following Confederation in 1867, this was reflected in the Dominion Government's policy of entering into treaties with Indian people in the newly acquired Hudson's Bay Company Territories. Among the exceptions was Yukon where the native people and the Canadian government did not sign any treaty¹⁴ or other agreement related to land occupancy or use; or on matters related to migration to the Yukon Territory of non-Indians who, in the Indian eyes, had taken over the Territory.

12 Personal communication, Land Claims Administrator, Government of Yukon, September 29, 1978.

13 Department of Indian Affairs and Northern Development, "Map Showing Crown Lands Designated by Department of Indian Affairs and Northern Development for Use of Indians", August 29, 1974.

14 Treaty 11 covers a small portion of the southeast corner of Yukon. However, negotiations in Yukon have been proceeding on the assumption that the comprehensive claims deal with all lands in Yukon and that the treaty could not interfere with this claim.

Pressure was exerted on the federal government for recognition of their aboriginal interest in the land and compensation for loss of this land. On August 8, 1973, the federal government issued a broad policy on claims to aboriginal title.

The policy reaffirmed that lawful obligations to Indian people must be met. The government would continue to recognize grievances that Indian people might have about the government's administration of Indian lands and other assets under the various Indian acts and regulations, as well as those regarding the actual fulfillment or interpretation of the Indian treaties or agreements, and proclamations affecting Indians and reserve lands. Claims made on this basis were termed "specific claims". The policy also formally recognized the existence of a native interest in those areas where it had not been extinguished by treaty or superseded by law (northern Québec, Yukon and most of British Columbia and Northwest Territories). This interest, described as "aboriginal" or "native" interest, has never been definitively expressed in Canadian law; it relates to traditional and prior usage and occupancy of land by native people in these areas.

The 1973 federal policy recognized that non-native occupancy of land in these areas had not taken this aboriginal interest into account, had not provided compensation for the gradual loss of this land, and had generally excluded native people from deriving benefits from developments that might have taken place as a result of non-native settlement. The policy indicated that claims made by native people on this basis were valid and had to be settled. These claims were termed "comprehensive claims".

The purpose of the comprehensive claim settlements is to contribute to the cultural, social and economic development of the native claimants,¹⁵ and the policy anticipated that the most promising way of reaching settlement would be through negotiation. In Yukon and Northwest

15 The political development of the Indian people is also viewed as an important part of the land claims from their perspective.

Territories, comprehensive claims differ from those that might arise in the provinces in one important aspect. Territorial land is held in right of the federal Crown. Consequently, the federal government has the authority (exercised in full consultation with territorial governments) to deal with interests in territorial land.

In Yukon, the Yukon Native Brotherhood (YNB) was formed to represent the interests of Indians registered under the Indian Act and the Yukon Association of Non-Status Indians (YANSI) was formed to represent those people of Indian descent who are not "registered" according to the Indian Act.

In 1969 the YNB was authorized by its band members to negotiate the settlement of what the native people believed to be their rightful interests in the Territory. In the period 1969 to 1972, community meetings were held by the YNB to develop a position paper and a settlement proposal. In January 1973 a final draft was completed. On February 14, 1973, the YNB, with the support of YANSI, presented the federal government with their document "Together Today for Our Children Tomorrow". Its stated aim was: "... to enable the Indian people in the Yukon to live and work together on equal terms with the white man" and the method of attaining this was to produce an economic base from which Indians could compete with the white man.

A negotiating committee was formed by the federal government (which included the Commissioner of Yukon) to meet with the YNB and preliminary negotiations began. In November 1973, the Council for Yukon Indians (CYI) was formed by the YNB and YANSI as a joint body to negotiate the Yukon Indian land claim. The YNB and YANSI assumed responsibility for various ongoing activities in which they were involved. Contact was maintained with the claim through membership on the CYI Board of Directors. Negotiations began in the fall of 1973 but progressed slowly.

On March 3, 1975, following a series of discussions between the CYI, the Yukon government and the federal government, a working paper outlining the federal position was issued.

In October 1975 a Special Government Representative for Comprehensive Claims in Yukon was appointed and a senior claims representative was stationed in Yukon, with an office in Whitehorse. The target date for an agreement-in-principle was set for March 31, 1976. Thus began the second round of negotiations on the Yukon Indian land claim.

Negotiations began in Whitehorse in November 1975 and continued into January 1976. The Yukon government's position paper on the Yukon Indian land claim was publicly released in November 1975. It was approved by the Yukon legislature in December 1975. The Yukon Executive Committee put forward a draft agreement-in-principle and a position paper, "Meaningful Government for all Yukoners", which proposed four Indian seats in the Yukon legislature. These documents were presented to the Indian negotiating team in January 1976. In May 1976 the president of the National Indian Brotherhood publicly released and actively opposed any settlement based on the federal draft agreement-in-principle, and expressed great concern about the secrecy of negotiations. These actions immobilized the CYI who had carried out preliminary community discussions and the March 31, 1976, target date for an agreement-in-principle was delayed.

In June 1976 negotiations were suspended. In the following months the chief negotiator for the CYI resigned, the federal negotiator was reassigned and the Commissioner of Yukon retired. These changes resulted in a complete change of the principal negotiators.

The third round of negotiations began in January 1977. Because the previous negotiations had been plagued by questions of secrecy, a decision was made to employ an open planning process rather than confidential negotiations. A Planning Council was established to undertake a "cooperative planning process" and serve as the body responsible for the

conduct of negotiations. In addition to the Planning Council, working groups were established composed of representatives appointed by each party on the council (federal government, Yukon government and CYI). During 1977 the Planning Council developed, agreed upon, and made public four documents relating to the claim. These four documents were:

- (1) Cooperative Planning Toward a Settlement of the Yukon Indian Claim, January 18, 1977 (sets out a process for resolving the many issues involved);
- (2) A Statement of Goals and Objectives, March 8, 1977 (sets out the goals of the settlement);
- (3) Eligibility Criteria and Appeal Procedures, March 8, 1977 (defines who is eligible to participate in proceeds of a settlement);
- (4) Settlement Model, July 14, 1977 (statement of the means by which goals and objectives of a settlement might be reached).

This latter document lays the foundation for an agreement in principle.

In December 1977 the federal government placed a proposal before the CYI concerning key elements of land, environmental protection and compensation. The CYI received this proposal and advised that it needed time to develop a comprehensive proposal of its own.

The CYI considered a draft comprehensive claim package at their General Assembly in April of 1978 and are in the process of community consultation aimed at refining their working document for final ratification by the General Assembly of the CYI. This would be followed by a formal presentation to the government and negotiations toward an agreement-in-principle.

OTHER NATIVE LAND CLAIM IN YUKON

THE COMMITTEE FOR ORIGINAL PEOPLES' ENTITLEMENT (COPE)¹⁶

COPE submitted a claim to the federal government May 13, 1977. This claim, entitled "Inuvialuit Nunangat" (Land of the Inuit of the Western Arctic), called for outright ownership of about 181 300 km² (70,000 mi.²) of land and 113 960 km² (44,000 mi.²) of water in the western Arctic, a regional municipal government, a public land management agency, the protection and strengthening of Inuit cultural identity, and the protection of Arctic wildlife and the environment. Subsequent discussions between COPE delegates and DIAND officials led to a proposed settlement announced by the Minister of DIAND July 17, 1978.

The proposed settlement would involve a cash payment, which has a present value of \$45 million, with a series of annual payments to be made over the period 1981-1994. In addition, the Inuvialuit would receive title to surface and subsurface rights of about 12 950 km² (5,000 mi.²) of land, and title to the surface rights of about 82 880 km² (32,000 mi.²). The Inuvialuit would also be given exclusive right to harvest game on their lands and exclusive right to harvest furbearers in the western Arctic region. They would also have the preferential right to harvest other species for subsistence purposes. Other natives would continue to have traditional harvesting rights and those currently holding hunting licences or operating registered traplines would not be affected.

In addition, the joint position paper provided that a least 12 950 km² (5,000 mi.²) of the Yukon north slope be reserved for a national

16 Based on "A Comprehensive Look at Land Claims", Yukon News, May 17, 1978; "2,500 Eskimos Get Vast Lands, \$45 Million", Vancouver Sun, July 14, 1978; "COPE No Model for Yukon", Whitehorse Star, July 17, 1978; "COPE Claims Signed Without Changes", Yukon News, November 1, 1978; and Canadian Arctic Resources Committee, Northern Perspectives, Vol. 6, No. 4, 1978.

wilderness park, and recommended, that the government consider setting aside the entire area in Yukon north of the Porcupine River as a national wilderness park. Hunting, fishing, and trapping rights in the proposed park would be guaranteed to natives of Yukon and Northwest Territories who can demonstrate that they have traditionally used the area. The Inuvialuit would also be allowed to establish small settlements at certain traditional coastal locations, within the proposed park, and would be guaranteed certain economic opportunities related to park activities.

An eight-member national wilderness park steering committee, consisting of representatives of the Inuvialuit, other native people, the federal and Yukon governments, is proposed. This committee would advise on the function and management of the proposed park.

The wilderness park would exclude an area of up to 13 km² (5 mi.²) of land and adjacent offshore area for the purpose of a port in the vicinity of Pauline Cove on Herschel Island.

If certain portions of the proposed wilderness park are withdrawn from wilderness status, they will be owned by the Inuvialuit. The title to such land would not be allowed to exceed 2 590 km² (1,000 mi.²).

This joint position paper formed the basis for the signing of an agreement-in-principle between the federal government and COPE on October 31, 1978, in Sachs Harbour, Northwest Territories. It is expected that negotiations leading to a final settlement will take another year.¹⁷

17 "COPE Claims Signed Without Changes", Yukon News, November 1, 1978.

TERRITORIAL EVOLUTION OF NORTHERN CANADA¹⁸

The area we now know as Yukon and Northwest Territories, the provinces of Alberta, Saskatchewan, and Manitoba, as well as northern portions of Ontario and Quebec, were originally part of Rupert's Land and the North-Western Territory. Rupert's Land, which encompassed much of the northern land, had been given to the Hudson's Bay Company by the Royal Charter of 1670. Under the British North America Act (BNA Act) of 1867, enabling legislation was passed in 1868 for the surrender of certain proprietary rights of that company, but allowed it to carry on trade and commerce in this northern land. In 1870, an Order-in-Council declared that the North-West Territories (North-Western Territory and Rupert's Land) were part of Canada. From part of this area, the southern portion of Manitoba was created as the fifth province in 1870. In 1898, the Yukon Territory was created as a territory separate from the North-West Territories. In 1905, Alberta and Saskatchewan were created as separate provinces. By 1912, Manitoba and Ontario attained their present boundaries, and Québec was extended northward to Hudson Bay and Hudson Strait, thereby establishing the southern boundary of the present Northwest Territories.

DOMINION LANDS POLICY

Between 1872 and 1930, the Dominion Lands Act was the statutory means by which public land in Yukon, Northwest Territories and the three prairie provinces, was administered by the federal government. In 1930, Manitoba, Saskatchewan and Alberta assumed control and management of their own land and natural resources through the Natural Resources Transfer Agreement Act. In addition, mining in Yukon, while remaining a federal responsibility, was provided for under separate legislation - the Yukon Quartz Mining Act and the Yukon Placer Mining Act.

18 Based primarily on Naysmith, Land Use and Public Policy in Northern Canada, pp. 1-59; Kenneth P. Beauchamp, Land Management in the Canadian North (1976), pp. 3-9.

The Dominion Lands Act of 1872, designed primarily to encourage settlement and development of agricultural land in western Canada, provided the legal authority for the disposition of northern land and associated resources. Although not drafted with the Canadian north in mind, it was the legislative base for the administration of federal lands in the north for over three-quarters of a century - until the passage of the Territorial Lands Act in 1950.

By 1950 the Dominion Lands Act was seen as largely inappropriate for administering federal land in the north and was replaced by the Territorial Lands Act, which was assented to June 1, 1950.¹⁹ This latter Act applied to all land in the Yukon Territory and Northwest Territories vested in the Crown or under the control, management and administration of what is now the Minister of Indian Affairs and Northern Development (virtually all of the land). However, it did not take precedence over the Yukon Quartz Mining Act (originally passed in 1906) or the Yukon Placer Mining Act (originally passed in 1924).

FEDERAL AND TERRITORIAL ADMINISTRATION OF THE LAND RESOURCE²⁰

Lands in Yukon (and Northwest Territories) are either under federal or territorial administration, although all lands are ultimately under the jurisdiction of the federal government. Only since 1954 have the territorial governments been given administration of certain lands for certain limited purposes. Section 46 of the Yukon Act states:

The following properties, namely,

- (a) lands acquired before or after the 1st day of April 1955 with territorial funds,
- (b) public lands, the administration of which has, before or after the 1st day of April 1955, been transferred by the Governor in Council to the Commissioner,

¹⁹ The Territorial Lands Act 1950, S. 26, repealed the Dominion Lands Act, the Irrigation Act and the Reclamation Act.

²⁰ Based on Beauchamp, Land Management in the Canadian North, pp. 7-9.

- (c) all roads, streets, lanes and trails on public lands, and
- (d) lands acquired by the Commissioner pursuant to tax sale proceedings,

are and remain vested in Her Majesty in right of Canada, but the right to the beneficial use or to the proceeds thereof is hereby appropriated to the Commissioner and is subject to the control of the Commissioner in Council; and any such lands, roads, streets, lanes or trails may be held by and in the name of the Commissioner for the beneficial use of the Territory.

Similar provisions apply in Section 46 of the Northwest Territories Act.

The Territorial Lands Act, the most important federal legislation concerning northern lands, clarifies the extent of this transfer of rights. It also establishes the framework for the use of lands under the control, management and administration of the federal government, and certain sections limit the interest in lands appropriated to the territorial governments under their enabling acts. For example, in lands transferred to the territories (commonly known as Commissioner's lands), all mineral rights, whether solid, liquid or gaseous, are reserved to the federal Crown and the Crown may make regulations for leasing mining rights on those lands. All water rights and the bed below ordinary high-water mark of a body of water remain under federal control, unless otherwise stated. In addition, a 30.5 m (100 ft.) wide strip from the high water mark of the sea or navigable water, and from the boundary with a province, Alaska, or the other territory, is subject to the Territorial Lands Act, i.e. it cannot be sold.

In summary, the territorial governments have the right to the beneficial use or to the proceeds of lands which have been purchased from territorial funds; lands which have been transferred to them by federal Order-in-Council; or lands which have been acquired by them in tax sales; all roads, streets, or trails on public land; and to administer surface uses only, subject of the above-noted reservations. Territorial ordinances then allow the territorial government to sell, lease or otherwise dispose of, the surface rights in those lands, which are mainly around larger communities. Outside established municipalities and settlements,

only scattered parcels are under territorial administration. These lands outside of established municipalities are primarily required for highway maintenance, roadside parks and tourist campsites or are former private lands forfeited to the territory because of non-payment of taxes. In conclusion, it can be stated that, except around established communities, the bulk of land in Yukon (and Northwest Territories) is under the control, management, and administration of the federal government. This land is subject to disposal only by the federal government, through the Minister of Indian Affairs and Northern Development. Table 3 provided an approximation of surface areas under territorial and federal jurisdiction. Because so much of the area is unsurveyed, precise statistics are not available.

CURRENT ADMINISTRATION OF LAND AND RELATED RESOURCES IN THE TERRITORIES²¹

The purpose of this section is to outline the present administration of land and related resources in the territories. The policies, programs and legislation of the various governmental agencies (federal and territorial) are described in more detail in subsequent chapters of this report.

As indicated previously, the Yukon Act lists the subjects over which the territorial government has responsibility. These responsibilities resemble those given to the provinces under Section 92 of the BNA Act. The territory, however, was not given control over lands, mines, minerals and royalties, that the provinces were given under Section 109 of the BNA Act. The provinces have both proprietary and legislative rights over the land and resources in their borders; this power remains with the federal government in Yukon and Northwest Territories. The responsibility for game management, however, has been delegated to the territorial governments. In addition, administrative responsibilities

21 Based primarily on Beauchamp, Land Management in the Canadian North, pp. 4, 11, 12, 39, 40 and Department of Indian Affairs and Northern Development, "Land Administration Manual" (January 1978).

over surface use of certain lands have also been given to the territorial governments; these responsibilities will be explained in more detail in Chapter III.

LANDS UNDER FEDERAL CONTROL

The Department of Indian Affairs and Northern Development (DIAND) has been given responsibility for control and management over vacant Crown land (i.e. the majority of land in Yukon and Northwest Territories). Through the Indian Affairs and Northern Development Act, the Minister has the control, management and administration of all vacant Crown land and resources in the territories that have not been assigned to any other department.

It can be generally stated that, except for matters relating to fisheries (the Fisheries Act), migratory birds (Migratory Birds Convention Act) which are handled by the federal Department of the Environment, wildlife (Game Ordinance) which is under the responsibility of the Yukon government, and specific tracts of land in use by other federal departments, DIAND is responsible for all federal land interests in Yukon.

Within DIAND, overall functional responsibility for land management and resource development in the north has been delegated from the Minister to the Deputy Minister, and further to the Assistant Deputy Minister, Northern Affairs Program.

In the Northern Affairs Program, responsibility for the management of the Crown lands and their natural resources rests with five distinct but functionally interrelated organizations: the Northern Environmental Protection Branch; the Northern Water, Lands and Forests Branch; the Northern Non-Renewable Resources Branch; and two regional organizations located in the Yukon Territory and the Northwest Territories. Each of the regional organizations is headed by a Regional Director with staff based at Whitehorse and Yellowknife.

The Northern Water, Lands and Forests Branch and the Northern Environmental Protection Branch are responsible for the development of programs and policies pertaining to management of the surface rights in land; renewable resources attached to the land, including forests and water; and protection of the natural environment. These two branches are headed by the Director General, Northern Environment at headquarters in Ottawa-Hull.

The Non-Renewable Resources Branch is responsible for the development of programs and policies pertaining to the management of subsurface rights in the land (oil, gas and minerals resources), and for granular materials which are managed as a surface right in land. This branch is headed by the Director General, Resources and Economic Planning at headquarters.

The relationship between these two arms of the Northern Affairs Program (Renewable Resources and Non-renewable Resources) may be summarized as follows: the renewable resources group is responsible for policing industry operations, which have been authorized by the non-renewable resources group, and for ensuring compliance with established environmental guidelines.

At headquarters in Ottawa-Hull, both the operational and policy aspects of the management of surface rights in land are carried out by a Land Management Division. This division consists of four sections: Lands Policy, Land Use, Land Disposition and Land Planning. In the Yukon regional office located in Whitehorse, the land management function is carried out by a Land Resources group, headed by a Regional Manager. There are also four sections under the regional manager: Supervisor of Lands (responsible for land disposition); Land Use (responsible for administration of the Territorial Land Use Regulations); Research, Policy and Program Development; and Planning, Inventory and Mapping.

The regional organizations are responsible for the development and implementation of operations programs to achieve policy objectives in areas of resource development and environmental protection.

A functional organization chart depicting the organization of DIAND with respect to land management is indicated in Figure 1.

As previously mentioned, the Territorial Lands Act and accompanying regulations are the main pieces of legislation governing land disposition and use in Yukon. Under this act there are accompanying regulations dealing with disposal of surface rights (Territorial Lands Regulations), oil and gas rights (Canada Oil and Gas Land Regulations), timber harvesting (Territorial Timber Regulations), coal mining (Territorial Coal Regulations), quarrying (Territorial Quarrying Regulations), dredging (Territorial Dredging Regulations) and protection of lands (Territorial Land Use Regulations). In addition, DIAND administers the following acts (and supportive regulations) which directly affect land use in Yukon: mining and mineral leasing (the Yukon Quartz Mining Act and the Yukon Placer Mining Act)²², water use (the Northern Inland Waters Act and the Arctic Waters Pollution Prevention Act), and the preservation of the natural landscape (the National Parks Act).

LANDS UNDER TERRITORIAL CONTROL

The jurisdictional responsibilities of the Yukon government, with respect to land and related resources, is quite different from that of provincial governments. Therefore, a brief outline of the Yukon government, its organization and a functional organization chart are provided.

Government of the Yukon Territory²³

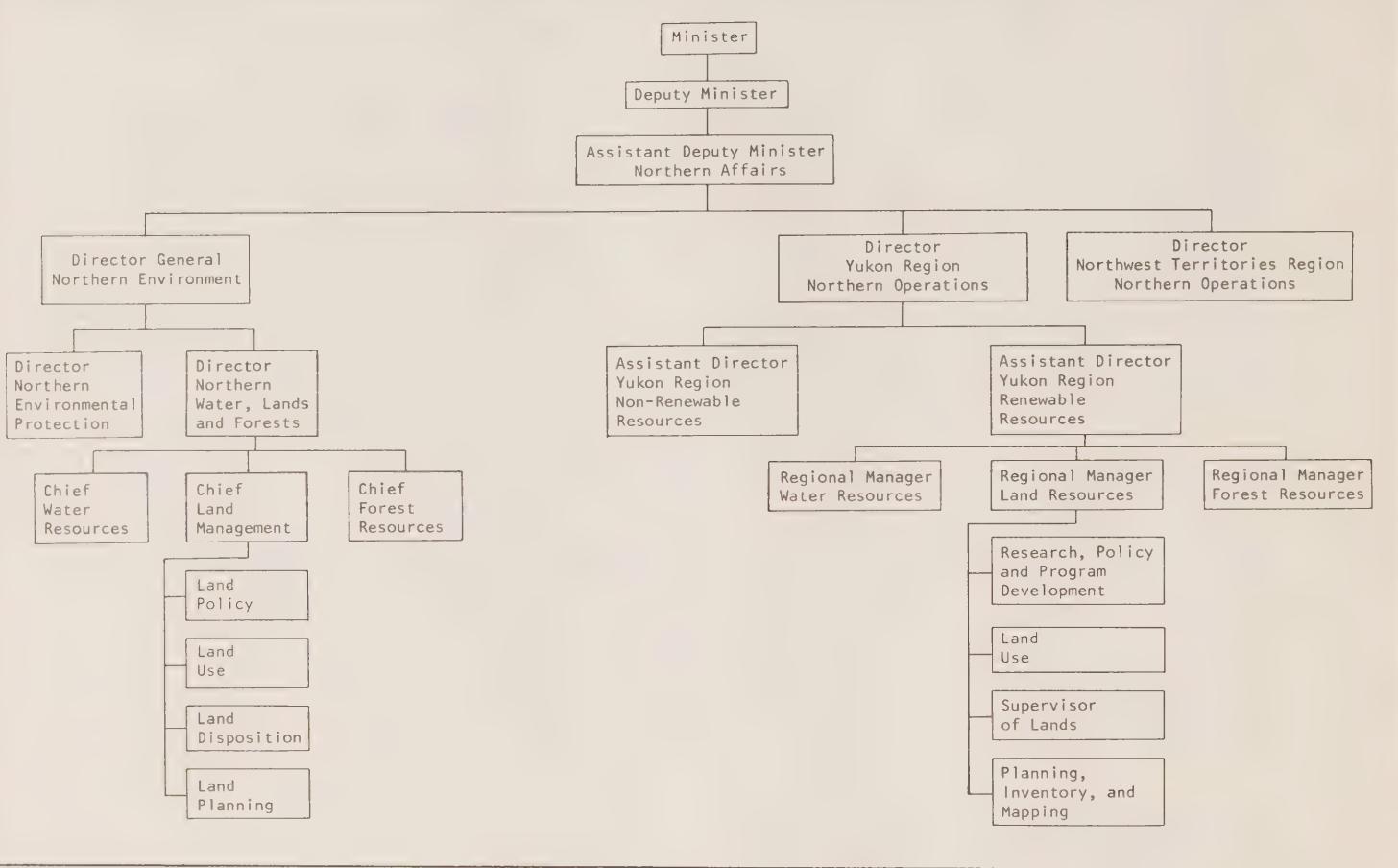
Yukon was created as a separate territory in 1898 and the first wholly elected territorial council was established in 1908.

22 This differs from the Northwest Territories where mining and mineral leasing is provided for under the Canada Mining Regulations pursuant to the Territorial Lands Act.

23 Based primarily on Lysyk, Bohmer and Phelps, Alaska Highway Pipeline Inquiry, pp. 15 and 17; Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 3; Statistics Canada, Canada Year Book 1976-77 Special Edition, p. 122; and Beauchamp, Land Management in the Canadian North, pp. 3-5.

FIGURE 1

DIAND Organization for Land Management



Sources: DIAND Organization Chart, December 15, 1977 and DIAND, Land Administration Manual (January 1978), Appendix A to Part I.

Note: This Figure indicates the organization of DIAND only with respect to those components most directly related to land management. There is, for example, a further organizational breakdown under water resources which is not shown.

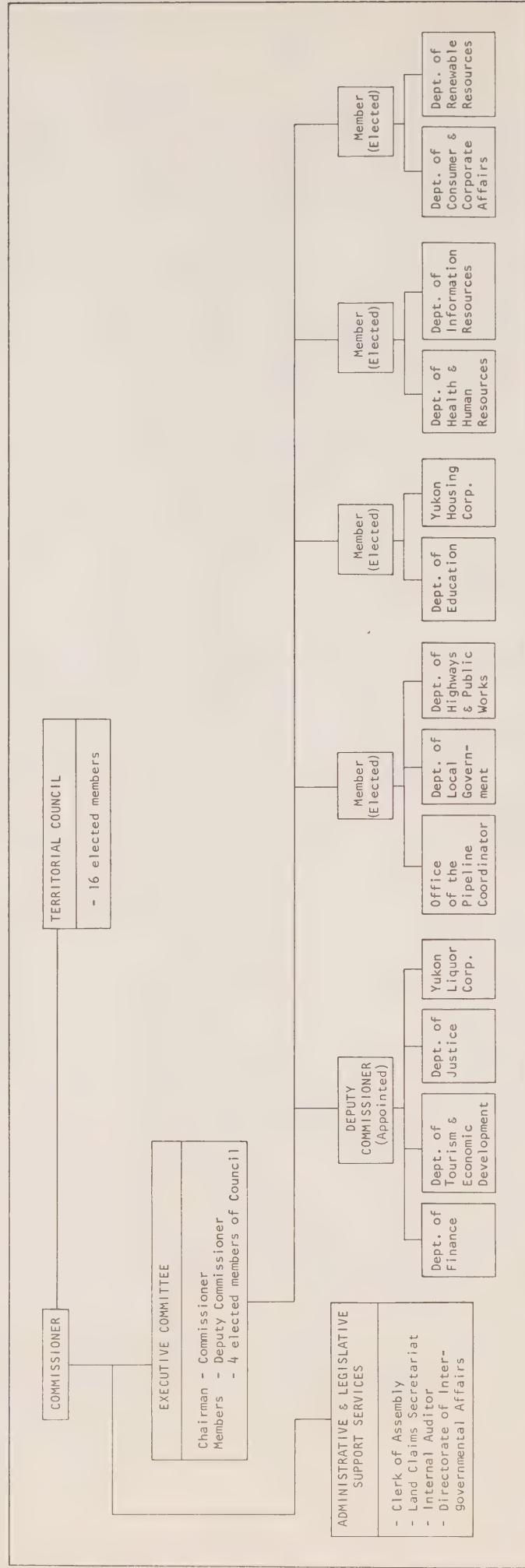
The constitution for the government of the territory is based on two federal statutes: the Yukon Act and the Government Organization Act. The Yukon Act provides for a Commissioner as head of government and for a legislative body (Yukon Legislative Council). The jurisdiction of the legislative council is similar to provincial legislative assemblies with two exceptions: (1) matters dealing with natural resources, except legislation concerning the preservation of game, are reserved to the federal government, and (2) budgetary matters are reserved to the Commissioner. Council is called into session and prorogued by the Commissioner. All bills approved by Council must be assented to by the Commissioner before becoming law. The number of elected representatives of the Yukon legislature was increased from 12 to 16 in the last territorial election held November 20, 1978.

Under the Government Organization Act, the Minister of DIAND is responsible, with the Governor-in-Council, for directing the Commissioner in the administration of the territory. The Commissioner is the chief executive and senior federal officer in Yukon. The Deputy Commissioner is an administrator appointed by the Governor-in-Council to act in the absence of the Commissioner. In administering the territorial government, the Commissioner is assisted by an Executive Committee. This Executive Committee consists of the Commissioner as chairman, four elected members of the Yukon Legislative Council, and the appointed Deputy Commissioner. It functions in a fashion similar to that of a provincial government Cabinet. Members of the Executive Committee develop broad guidelines for the conduct of government business, are responsible for the coordination of government activities, and advise the Commissioner in carrying out the duties of that office as outlined in the Yukon Act. Individual members of the Executive Committee have direct responsibility for one or more government departments, subject to the direction of the Commissioner. Figure 2 provides a functional organization chart of the government of Yukon.

Certain lands in the territories, primarily those in and around communities, are also under the administrative control of the

FIGURE 2

Functional Organization Chart - Government of Yukon



Source: Government of the Yukon Territory, Government Services Guide, April 1977. Updated from discussions with territorial officials, 1978.

Note: The number of members elected to the Territorial Council was increased from 12 to 16 in the territorial election which was held November 20, 1978. This organization chart outlines Executive Committee members' responsibilities for government departments and agencies as they were prior to the election.

territorial government. These lands are commonly known as "Commissioner's lands" and are discussed in detail in Chapter III.

The Department of Local Government administers the Lands Ordinance, the Area Development Ordinance and is responsible for disposition and management of Commissioner's lands. Other responsibilities of this department include community development, planning and property assessment. This department is headed by a Director who is responsible to a member of the Executive Committee for its operation.

Other departments of the Yukon government responsible for land and natural resources management include Highways and Public Works, and Renewable Resources. The Department of Highways and Public Works administers the Highways Ordinance and Regulations, and is responsible for highway construction and maintenance, development and maintenance of highway rest stops, operation of ferry service at Dawson, barge service at Ross River, maintenance of airports and airstrips throughout Yukon (except Whitehorse and Watson Lake), management of territorial office buildings, and municipal engineering on behalf of the Department of Local Government. More detail is provided in Chapter XI, Transportation. The Department of Renewable Resources includes the Wildlife Branch, which is responsible for game management in Yukon. It is responsible for administration and enforcement of the Game Ordinance, Fur Export Ordinance, and Pounds Ordinance; enforcement of Migratory Birds Convention Act, Canada Wildlife Act, Game Export Act; and enforcement of Freshwater Fisheries Regulations. The Branch also conducts research and educational programs that are necessary for proper wildlife management. The Parks and Historic Sites Branch of the Department of Renewable Resources is responsible for planning, developing and administering outdoor recreation areas, including campgrounds, day-use areas, and historic sites.

Among other ordinances which are of less significance in terms of land use and land use planning, but which are nevertheless related, are: Expropriation Ordinance (applies only to Commissioner's lands and

private land), Historic Sites and Monuments Ordinance (provides for designation of historic sites and establishment of an Historic Sites and Monuments Board), and Forest Protection Ordinance (fire prevention and fire fighting).

AGRICULTURE²⁴

Yukon has never been seriously regarded as a place where agriculture could be carried out commercially on a large scale, although there have been times when it has played a small but important role.

Crops were introduced into Yukon in the middle of the nineteenth century by traders of the Hudson's Bay Company. Potatoes and vegetables were grown successfully at Fort Yukon and barley is reported to have matured there.

With the arrival of gold seekers in 1873, agricultural activity expanded. The greatest agricultural activity that has ever taken place in Yukon occurred around the turn of the century during the Klondike gold rush. Large quantities of vegetables and forage were raised on farms in the Dawson area. With the drop in population after 1901, most larger farms were abandoned and production of vegetables became confined mainly to gardens.

In 1915 Daniel Cadzou established a 146 ha (360 a.) farm at New Rampart House, about 48 km (30 mi.) downstream from the present settlement of Old Crow. In that same year, the Dominion Department of Agriculture began conducting cooperative experiments with individuals in Yukon who were interested in growing crops. In 1917, an experimental substation was established at Swede Creek (near Dawson); this station was discontinued in 1925.

²⁴ Based on R.W. Peake and P.H. Walker, Yukon Agriculture: A Policy Proposal, prepared for the Government of the Yukon Territory by R.W. Peake and Associates Ltd., Lethbridge, Alberta (February 1975).

During the 1920s, farming operations were carried out at the Pelly farm (on the banks of the Pelly River near its mouth), in the Dawson area, Mayo area and at Carcross.

In 1944, a 324 ha (800 a.) site was selected at Haines Junction for an experimental farm. Some land was broken in 1945 and the first seeding took place in 1946. This farm was discontinued in 1968. During its operation experiments were conducted with animals, forage and cereal crops, vegetables and flowers.

The first realistic approach to estimate the agricultural potential of Yukon was not made until the 1940s. In 1959, potential arable lands in Yukon were estimated to be 118 982 ha (294,000 a.), confined mainly to river valleys:²⁵

	hectares	acres
Takhini-Dezadeash valleys	89 034	220,000
Yukon River and tributaries	24 282	60,000
Tagish and Little Atlin	3 238	8,000
Dawson area	2 428	6,000
Total	118 982	294,000

The area of grazing lands was not estimated.

In 1962, the federal government appointed a committee to study the possibilities of farming and make recommendations for agricultural development in Yukon. That committee concluded that farming in Yukon, as a commercial full-time operation, had little chance of success then, or in the foreseeable future. Further information on agriculture is provided in Chapter VI.

²⁵ Ibid., p. 24 referring to Nowosad 1959 report.

FORESTRY²⁶

Forestry in Yukon dates back to the gold rush period of the late 1890s when the local logging and lumber industry developed in the Klondike to support the mining activity. For nearly 30 years after the gold rush almost all lumber used in the Territory was of local manufacture. Although there are no estimates of the volume of lumber produced during this period, these early timber demands practically exhausted the supply of accessible timber in the Dawson area. Consequently, after 1930, lumber requirements were supplied from British Columbia.

It is estimated that between 1898 and 1950, at least 300,000 cords of fuel wood were cut along the Yukon River for the river steamers plying between Whitehorse and Dawson.

Forestry activity remained virtually dormant until World War II. The construction of the Alaska Highway brought about increased wood utilization, as well as greater forest fire losses. During the war years, local timber cut under permit increased to about one million board feet of lumber and 20,000 cords annually. In addition, it is estimated that roughly 14.5 million board feet, 600,000 lineal feet and 49,300 cords were cut for military construction projects without permits being required.

In 1943 and 1944, forest reconnaissance surveys were carried out in Yukon by the Department of Mines and Resources, and, a Forest Protection Service, the forerunner of the present Yukon Forest Service, was organized.

26 Based on Department of Indian and Northern Affairs, Yukon Forest Service, "Forestry in the Yukon Territory", revised 1972; Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 39; and Foothills Pipe Lines (South Yukon) Ltd., Environmental Impact Statement for the Alaska Highway Gas Pipeline Project (January 1979), pp. 7-5 and 7-26.

Following World War II, the local forest industry slowly developed. In the 1951-52 fiscal year, 68 337 m³ (2,413,000 ft.³) of wood was cut, in the 1962-63 fiscal year 70 263 m³ (2,481,000 ft.³) was cut, in the 1973-74 fiscal year (the year between 1951-52 and 1976-77 which produced the greatest amount of primary forest production in Yukon), a total of 105 749 m³ (3,734,000 ft.³) was cut, and in the 1977-78 fiscal year (the latest year for which figures are available) 120 586 m³ (4,257,892 ft.³) of wood was cut in Yukon.²⁷

Because of a small local market, poor accessibility to other markets and competition from the British Columbia forest industry, forestry in Yukon is limited to small-scale logging and sawmilling. Production is limited almost exclusively to primary forest products (rough construction timber, building logs and firewood).²⁸ The most important commercial timber area is in the upper Liard valley in southeastern Yukon.

In 1978 there were 18 sawmills operating in Yukon. The majority of these mills were centred in the Watson Lake area where about 70% of the lumber in Yukon is produced. A total of 94 people were employed in the forest industry in 1977; 49 were employed in plants that operated for six months or less during the year.²⁹

The total value of forestry products increased from \$1,052,900 in 1967 to \$2,460,000 in 1977.³⁰

27 Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 39.

28 Foothills Pipe Lines (South Yukon) Ltd., Environmental Impact Statement for the Alaska Highway Gas Pipeline Project., pp. 7-5 and 7-26.

29 Ibid., p. 7-26.

30 "The Yukon", Trade and Commerce, Vol. 73, No. 3 (March 1978), p. 32.

MINING, OIL AND GAS³¹

The first prospectors in search of gold reached the Yukon River valley in the 1870s and 1880s. Northern mining began in the 1880s with placer gold production in what is now the Yukon Territory. During the next 30 years the main placer fields were discovered in the Klondike, Sixtymile, Stewart River, Big Salmon and Kluane areas. The first Canadian Government scientific expedition to the Yukon district in 1887-89 (geologists G.M. Dawson and R.G. McConnell and surveyor William Ogilvie) noted miners in various parts of the District. Intensive activity was taking place in the Forty Mile area. That expedition recorded asbestos in the vicinity of the Cassiar Asbestos mines at Cassiar, B.C., and Clinton Creek, Yukon.³²

In 1896 gold was discovered at Bonanza (Rabbit) Creek, near Dawson, and led to the famous Klondike gold rush.

Precise figures on gold exports from Yukon prior to 1896 are unavailable. After discovery of gold in the Klondike that year, output increased rapidly, reaching a maximum of 34 835 920 g (1,120,000 oz.) in 1900. In 1907, 4 936 125 g (158,700 oz.) of gold were produced, in 1913 9 159 981 g (294,500 oz.), and in 1926 only 777 588 g (25,000 oz.).

31 Based on Naysmith, Land Use and Public Policy in Northern Canada, pp. 52-59; Statistics Canada, Canada Year Book 1976-77 Special Edition, Chapter 12, pp. 581-640; Department of Indian Affairs and Northern Development, 1976-77 Government Activities in the North, Document ND529 (1977); Arctic Petroleum Operators' Association, A.P.O.A. Review, Vol. 1, No. 1 (February 1978), p. 6; J.A. Morin et al, Mineral Industry Report 1976 Yukon Territory, EGS 1977-1, Indian and Northern Affairs (1977); "The Yukon", Trade and Commerce, Vol. 73, No. 3 (March 1978), pp. 19-43; Whitehorse Chamber of Commerce, "(Quarterly Business) Development Report", Chamber Business News (March 1977); Lysyk, Bohmer, and Phelps, Alaska Highway Pipeline Inquiry, p. 64; Department Indian and Northern Affairs, Oil and Gas Resources in the Yukon Territory (July 1973); and Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 46.

32 The Clinton Creek mine ceased production July 31, 1978.

It is estimated that pre-Klondike gold production never exceeded \$300,000 annually. By 1900, however, the value produced reached a maximum of an estimated \$22,400,000. It subsequently declined from that year and in 1919, was only an estimated \$1,900,000.

Some lode gold was also mined. In 1976, 964 209 g (31,000 oz.) of gold produced an estimated value of \$3,910,000, down from an estimated 997 987 g (32,086 oz.) valued at \$5,255,077 which was produced in 1975. In 1977, 803 864 g (25,884 oz.) of gold were produced for an estimated value of \$5,943,000.

Copper was discovered at the Whitehorse Copper Belt in 1898 by miners on their way to the Klondike. The value of production in 1907 was estimated at \$100,000, \$500,000 in 1912 and over \$1 million in 1916 before closing down at the end of World War I. In 1976, 11 039 000 kg (24,336,000 lbs.) of copper valued at \$16,639,000 was produced in Yukon. This was an increase from the 8 487 245 kg (18,711,172 lbs.) of copper produced and valued at \$11,928,559 in 1975. In 1977, 11 941 000 kg (26,325,128 lbs.) of copper were produced for an estimated value of \$18,062,000.

Silver King Mine, the first of many high-grade silver-lead-zinc mines in the Galena Hill-Keno Hill-Mayo area operated from 1914 to 1918. By 1923, the annual production from this camp was over \$1.5 million, and by 1928, over \$2 million. By the end of 1976, United Keno Hill Mines and its predecessors had produced over \$850 million worth of metals (1977 prices).

Gold was the top producer in terms of value of production until the mid-1940s. In 1966, the last of the gold dredges ceased operation. Except for the production in the Whitehorse Copper Belt, which was worked sporadically until about 1930, almost the entire lode (non-placer) production of Yukon was from the United Keno Hill Mines' silver-lead-zinc-cadmium mines in the Elsa-Keno area.

In 1967, copper production in the Whitehorse area and asbestos mining at Clinton Creek commenced. In 1968 Mount Nansen started production, but closed in 1969. The Anvil Mine at Faro began production in 1970. Venus Mines began production in 1970, but closed in 1971. Hudson Yukon commenced operations in 1972 and closed the following year.

Today there are four (three underground and one open pit) mines operating in Yukon. The value of mineral production has increased over the past decade from approximately \$12 million in 1966. However, it did drop from \$228,840,396 in 1975, to \$130,469,000 in 1976, a decrease of 43%, due primarily to lengthy strikes at three mines. In the 1977 calendar year there was a substantial increase over 1976 to \$210,215,000.³³

In 1976, 1,246 persons were directly employed in mining. About the same number are engaged indirectly in secondary industries, such as transportation services. It is estimated that the Cyprus Anvil Mine at Faro, plus the coal it uses from a small mine at Carmacks, represent 40% of the Yukon economy.³⁴

The Cassiar Asbestos Corporation mine at Clinton Creek closed July 31, 1978, and Whitehorse Copper is scheduled to close in 1980-81. There is also some question as to whether the reserves of the United Keno Hill Mine at Elsa are sufficient to sustain it for much longer than the early 1980s.

Zinc, lead, silver, copper and asbestos made up 41.6%, 24.6%, 12.9% and 14.0% respectively, of the value of mineral products in Yukon in 1975. Gold, coal and cadmium made up the remaining 1.8%. Output is not large by national standards (about 1.7% of the total Canadian mineral value), but it is increasing.³⁵

33 Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 46.

34 Lysyk, Bohmer, and Phelps, Alaska Highway Pipeline Inquiry, p. 64.

35 Statistics Canada, Canada Year Book 1976-77 Special Edition, p. 585.

In 1976, exploration expenditures were estimated to be \$16.5 million; a decrease of roughly \$2 million from 1975.³⁶

With regard to oil and gas, Yukon has been under exploration for these resources for a comparatively short period of time. The first land holdings for exploration were acquired in 1952. After four years of geophysical exploration, the first well was drilled in Yukon in 1958. This was followed during the 1960s by an average of four wells annually. Gas was discovered in 1960 at Chance in the Eagle Plain of northern Yukon, and in 1964 at Beaver River in the southeast corner of Yukon, near the British Columbia border. Beaver River began production in 1971. In 1977, a well was drilled and tested in this same area and current proposals call for a gas gathering plant to be constructed.

The two main areas for potential oil and gas fields are in northern Yukon (roughly north of 65°) and in the extreme southeast corner of Yukon, adjacent to the British Columbia-Northwest Territories borders.

TOURISM³⁷

Although the first real tourists to Yukon arrived during the Klondike gold rush of the 1890s, the territorial economy remained almost solely dependent on the primary resource sector, prior to the late 1960s. Since that time, however, an increasing number of tourists have travelled to Yukon and today, tourism ranks next to mining as the second largest industry. It is estimated that 1,800 jobs (nearly 20% of the labour force) are related to the tourism industry. Tourist revenues have risen from an estimated \$2 million in 1962 to approximately \$33 million in 1978. Border crossings, the main indicator of visitor

³⁶ Morin, et al, Mineral Industry Report 1976 Yukon Territory, p. 4.

³⁷ Based on R.D. Graham, Department of Tourism, Government of Yukon, Yukon Tourism 1978 Industry Highlights (January 1979); Government of the Yukon Territory, Information Services, This is Canada's Yukon (March 1978); and Government of the Yukon Territory, Information Services, The Yukon Visitor, Vol. 1, No. 1, (May 10, 1978).

volumes, increased 21% over 1977 to 364,000 persons for the 1978 calendar year. Tourist spending has almost tripled in the period 1971 (\$11,939,265) to 1978 (\$33,000,000.).

Highway traffic increased 33% in 1978. There was also increases in air passenger traffic (19%) and length of stay. Visitors in 1978 came from the United States (71%), Canada (23%) and other countries (6%).

In terms of accommodation available in 1978, Yukon had 41 hotels with a total of 1,146 rooms, 38 motels with 614 rooms, four hostels with 165 rooms, 10 cabins with 41 rooms, 15 serviced campgrounds and 55 unserviced campgrounds. The major developments proposed for Yukon (e.g. natural gas pipeline, Haines Road-Alaska Highway reconstruction, hydro and mining), all have implications for the tourism industry.

HUNTING AND GUIDING, TRAPPING AND FISHING

HUNTING AND GUIDING³⁸

Yukon contains a diversity of wildlife. Within its boundaries are found some of North America's largest populations of barren-ground caribou, grizzly bears, Dall sheep, peregrine falcons and snow geese.

The Yukon Territory is divided into 11 game management zones. Specific seasons, bag limits and other provisions are applied in each of these

38 Based on Lysyk, Bohmer, and Phelps, Alaska Highway Pipeline Inquiry, p. 11; Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, pp. 18 and 46; Department of Public Works Canada and U.S. Department of Transportation, Federal Highway Administration, Environmental Impact Statement Shakwak Highway Improvement: British Columbia and Yukon, Canada, Volume 1, (December 1977); Foothills Pipe Lines (Yukon) Ltd., Public Interest Volume 5A Socio-Economic Statement, before the National Energy Board and to the Department of Indian Affairs and Northern Development (November 1976); Manfred Hoefs, "The Yukon's Wildlife Resources", Fifth Northern Resources Conference (1975), pp. 100-109; and G.M. Lortie and John McDonald, "Game Harvest Report and Summary of the Questionnaire Analysis", (February 1977).

zones in order to bring about better management of the wildlife resource.

Hunters in Yukon may be classified into three categories: residents, non-residents and status natives. Residents include all British or Canadian citizens who have resided in the Territory for at least six months, or non-citizens who have resided in the Territory for two years. Status natives include all Indians and Eskimos as outlined in the territorial Game Ordinance. Those not qualifying as residents, or status natives, are considered non-residents.

Full status natives may obtain free, general and big game hunting licences. They also have hunting rights on all unoccupied Crown land.³⁹ Accurate data on hunting pressures and harvest records are not available for this group. However, it is considered that much of their hunting activity is for the purpose of obtaining food and not directed toward trophy animals.

In 1976, resident hunters in Yukon spent an estimated \$2.5 million on hunting, related services and commodities.⁴⁰ Such expenditures included the cost of transportation, food, lodging, clothes, firearms and ammunition.

All non-resident hunters must be accompanied by a licenced hunting guide employed by a government approved outfitter. There are 22 registered guiding territories in Yukon with a total of 21 licenced outfitters. The Game Ordinance requires each outfitter to harvest the game in his assigned area on a sustained yield basis, or be subject to the suspension or cancellation of his licence.

39 The definition of Indian and Eskimo outlined in the Game Ordinance and the special rights of Indians and Eskimos are derived from Section 17 of the Yukon Act, and further, from the historical treatment of native people through treaties in southern Canada, and government policy.

40 Lortie and McDonald, "Game Harvest Report and Summary of the Questionnaire Analysis", p. 5.

The outfitters take out an average of 20 non-resident hunters each, for an average length of 14 days. The average rate charged by outfitters per hunter-day is \$200-\$225 (1975 figures). The total amount paid by non-resident hunters to outfitters is about \$1.3 million annually. In addition, an estimated \$150,000 is spent for hotel accommodation, meals, entertainment, travel, etc. Outfitters also employ, on a temporary basis, 100-120 guides for an approximate three-month period.⁴¹

In the period April 1, 1977, to March 31, 1978, 405 non-resident fall hunters and nine spring bear hunters (total 414 non-resident hunters) were accommodated by registered Yukon outfitters. During this same period, 3,870 resident hunters purchased licences. This included 412 licences issued free to residents over 65 and persons of Indian or Eskimo status.⁴² It is estimated that 1,800 hunters engaged in bird hunting in 1976; 98% hunted grouse and 23% hunted waterfowl.⁴³

Statistics indicate that the greatest percentage of moose, caribou and black bear are taken by resident hunters. Non-residents harvest the majority of trophy animals such as grizzly bear and Dall sheep. Trappers take the greatest percentage of caribou.⁴⁴

41 Hoefs, "The Yukon's Wildlife Resources", pp. 102-103.

42 Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 18.

43 Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1977, p. 18. The holder of a licence to take upland game birds may, upon purchase of a federal migratory bird licence, take migratory birds as well. The reason for the differing percentages of hunting effort is that not all holders of the former licence purchase the latter licence. Game bird harvest figures were not compiled for the 1977-78 fiscal year but it is thought that there was an increase in the harvest due to presently expanding game bird populations.

44 Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 46.

FISHING⁴⁵

The water resources of Yukon provide many opportunities for sport fishing (both resident and non-resident), a fishery of cultural and economic significance to native people, and a small local commercial fishery for salmon, lake trout and whitefish.

The average number of sport fishing licences issued for the five-year period 1972-1976 was 12,101; 7,386 to Canadian residents, 3,593 short-term (five days) to non-residents, 923 full-term to non-residents and 199 licences were issued free to residents over 65, and to persons of Indian or Eskimo status. In the 1977-78 fiscal year the corresponding numbers were 15,100; 9,642; 3,865; 1,105; and 488.

Non-Resident Fishery

In 1975, non-resident direct expenditures on fishing were estimated to be \$1.2 million (\$204 per angler or \$35 per angler-day). In addition, \$146,000 was spent on related items. In this same year, the level of fishing activity by non-residents was estimated at 35,000 angler-days with virtually all of this activity occurring during the summer (40% occurred during July). More than 76,000 fish were caught by non-residents in 1975; the majority were grayling (46,000), with lake trout the next most important (16,000). Most non-resident angling occurs near the Alaska Highway, the major tourist route.

Resident Fishery

Sport fishing is a very important recreational activity in Yukon.

45 Based on P. Eby & Associates Ltd., An Overview of Potential Impacts of Gas Pipeline Construction and Operation and Use and Value of Yukon Fisheries, for Department of Fisheries and Environment, Habitat Protection Directorate (July 12, 1977) and Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 18.

A 1977 outdoor recreation survey in Yukon revealed that 69.9% of the population sampled participated in fishing/ice fishing at least once during the year preceding the survey.⁴⁶

Direct expenditures on fishing by residents totalled about the same as that for non-residents; an estimated \$1.2 million (\$13 per angler-day). In addition, \$2.3 million was spent by residents on related items such as boats.

The fishing pattern of Yukon residents differs from that of the non-resident. Residents exhibit a strong preference for lake trout. Therefore, they are more oriented to lake fishing than the non-resident. There has been little conflict between resident and non-resident anglers since non-residents generally fish in areas easily accessible from main highways.

Native Fishery

Historically, natives relied on Yukon's fishery resource for food. It still appears that substantial numbers of Yukon Indians continue to fish for economic as well as social and cultural value. In 1972 it was estimated that approximately 400 natives participated in, or benefited from this type of fishery. The Ross River, Old Crow, Carmacks and Teslin Lake bands had the greatest participation rates.

In 1975 an estimated 10 886 kg (24,000 lbs.) of freshwater fish were harvested in the Indian fishery; 62% of this was whitefish and 21% lake trout. There is little site-specific information on the freshwater Indian fishery.

46 Thomas L. Burton, Outdoor Recreation in the Yukon, the Final Report of a Yukon Residents' Outdoor Recreation Survey, 1977. Prepared on behalf of the Government of the Yukon Territory and Parks Canada (December 1977), p. 51.

With regard to the native salmon fishery, the average annual harvest is 16,435 salmon. The Old Crow chum salmon fishery accounts for over one-half (10,000) of this total.

It is believed that harvests, as well as the economic and social significance of the fishery for natives, have been underestimated.

Commercial Fishery

A small commercial fishery exists in Yukon for salmon and freshwater fish. The commercial fishery is divided into three parts: the salmon fishery, the Alaska salmon fishery (which is partly dependent on Yukon fish) and the freshwater fishery. In 1975 a total of 69 commercial licences were issued to fishermen in Yukon. Virtually all of the marketed commercial catch is sold locally. A combination of high transportation costs, small chinook salmon runs and low catch/effort ratios tend to limit the potential for expansion of the commercial fishery.

The annual harvest of commercial salmon over the period 1967-76 remained fairly constant at about 4,500 to 5,000 fish, although the value increased markedly from about \$16,000 in 1967, to about \$70,000 in 1976.

The commercial salmon fishery is conducted during the summer with approximately 90% of the harvest taken in the Yukon River, downstream from Tatchun Creek (just downstream from Carmacks). The balance of the harvest is taken in the Pelly and Stewart rivers.

Lake trout, whitefish, pike and burbot are harvested in a freshwater commercial fishery, although only lake trout and whitefish are fished intentionally.

Virtually all freshwater commercial fishing takes place in lakes, and occurs during spring and winter. It is estimated that 51% of the lake trout and 66% of whitefish are taken in winter fishing.

Only 20 lakes are presently open to commercial fishing. Four-fifths of the activity occurs in Laberge, Teslin, Atlin, Kluane and Bennett lakes. Quotas are established for each lake, generally on the basis of an estimate of one-half pound per surface acre, of which only half may be lake trout.

Summary

In summary, the major native fishery for salmon is located in the vicinity of Old Crow, Klukshu, the Yukon River at Minto and Carmacks, and Johnsons Crossing at the outlet of Teslin Lake. The major freshwater fishing areas are Kluane, Marsh and Teslin Lakes. The most important freshwater commercial fishery is located in Lake Laberge.

TRAPPING⁴⁷

Prior to 1898

Prior to the arrival of white men, the natives in Yukon relied on fur-bearing mammals as an alternate source of food and clothing. A well-developed trade system among natives was also in operation. By the mid-1800s, Yukon was attracting numerous prospectors, adventurers and explorers, several of whom had opened trading posts and who were actively engaged in fur harvesting. At this time there appeared to be little or no conflict between Indian and White use of the wildlife resource.

During this same period, monopoly traders began to move into Yukon, and trading posts were established. By 1895 several trappers were trading directly at these posts, rather than through intermediaries. At this time there was also a shift away from subsistence resource use to an economically motivated exploitation.

47 Based primarily on W. Ralph Archibald, W.J. Klassen and John McDonald, "The History, Development and Present Direction of the Fur Industry in the Yukon Territory", a report presented at the 3rd Annual Western Fur Managers' Conference (1977).

The fur resource was utilized most effectively by individual family units. Trapping areas were recognized as belonging to a trapper and his family and were trapped year after year. Such a practice ended several family hunting groups that had previously led a nomadic existence within a limited territory.

Settlements developed around trading posts. These settlements served as a base of operations for the trapper. He lived there during the summer and in winter used it as a base for tending trap lines. Families generally spent the winter in their trapping areas, and returned to the settlements after breakup.

1898-1920

The effect of the Klondike gold rush on the fur industry was that few of those who arrived in Yukon seeking their riches during this period ever found it, and prospectors were forced to seek alternate employment during the winter months. Thus trapping became the economic mainstay for many of them.

The appearance of retail merchants at wood depots along the Yukon River also had a long-lasting effect on the fur industry. These merchants became fur traders and buyers. Settlements soon sprang up around these trading posts.

The natives, who prior to the gold rush were almost completely dependent upon trapping for their livelihood, now had an alternate source of income available to them. Some became hunters, supplying moose and caribou meat to miners, others became woodcutters and deckhands on the riverboats, and still others took various jobs in the wage economy.

There was renewed interest in the fur industry as gold mining activity declined. Native trappers returned to their homes and resumed trapping. By 1920 the primary fur industry in Yukon had more or less stabilized once more. Most trappers were located in communities during the

off-season and the individual family group became the most efficient economical unit once more.

1920-1950

By 1920, the territorial government had introduced closed seasons for various species. In that same year an annual compilation of fur harvest statistics and the levying of a fur export tax began. This represented an initial attempt at fur management in Yukon. Natives were also restricted to open seasons in their revenue trapping activities.

During this period, trapping flourished and the annual pelt production increased from 16,125 in 1920-21, to 228,616 in 1950-51. Fur was the second most important contributor to the Territory's economy (next to mining) as late as 1942. At this time trapping was the sole source of income for most trappers. No data are available on the number of active trappers during this period.

To protect the rights of Yukon trappers, the territorial government instituted a \$300 non-resident trapping licence in 1937. Before World War II, virtually all trappers in Yukon were Indian. After the war, an increasing number of non-Indians began trapping as a means of livelihood.

In 1947 legislation was enacted that "required all trappers to be licenced, but to qualify, applicants could not have some other main occupation". Registered trapline districts or fur rehabilitation blocks could also be created, by the Commissioner, that would control the fur harvest by close regulation of numbers, species and season. In addition, by this time a compilation of trapping area maps had begun and, in some instances, prior rights were considered before allowing a new trapper into a specific area. This was the forerunner of trapline registration.

Although trapper productivity increased fourfold between 1946 and 1950, the total value of the fur production remained constant. The more restrictive legislative control over trapping, availability of alternate sources of income, and decreasing fur prices led many trappers to investigate alternatives to trapping as a means of livelihood.

1950 to Present

The Territorial Game Ordinance was amended in 1951 to create the office of Director of Game. In 1952 the Registered Trapline Ordinance was passed. The intent of this latter ordinance was to protect the individual's right to trap a given area to the exclusion of all others. Trapline registration was also intended as a management tool, insofar as it facilitated regulation of fur harvests in specific areas. Trappers were required to renew trapline registrations on an annual basis. Renewals were correlated to fur market fluctuations. In 1958 a five-year period of registration was initiated by the territorial government.

There are 387 individually registered traplines and three group trapping areas that cover the entire Yukon. Everyone wishing to trap as a livelihood, or merely for recreation, may obtain an Assistant Trapper's Licence that is specific to a particular line and must be co-signed by the registered trapper for that line. In order to gain access to a group trapping area, written consent must be obtained from all members of the group. Such a system allows prospective trappers the opportunity to serve a period of apprenticeship before applying for their own registered area. A registered trapline does not convey any rights to the land other than giving the holder sole rights to trap in a given area. At present, because there are few vacant areas, it is difficult to obtain a registered trapline.

The total number of trappers is estimated at 500-600 individuals, more than three-quarters of whom are of Indian ancestry. There is no accurate record of those who trap steadily, or only intermittently each year.

However, in 1975-76, Yukon trappers produced 28,897 pelts for a market value of \$367,677.⁴⁸ As a source of territorial revenue trapping has decreased in importance from a high of 17% in 1929, to 0.03% in 1975-76. The catches and value vary from year to year, depending upon trapping effort, prices, and cyclical population trends. For example, the total value for the harvest in Yukon for the 1976-77 season was \$430,105, an increase of 18.5% over the previous year (lynx accounted for 34.2% of this value). The total number of furbearers taken during the 1976-77 year doubled from the previous year to a total of 54,124 animals.⁴⁹

In 1975-76, the average financial return to Yukon trappers was: registered traplines (white) \$861.41 per person; registered traplines (Indian) \$433.61 per person; and for group area (Indian) \$272.27. This indicates the difference in selective trapping efforts by Indian and whites and may also represent different philosophies of furbearer utilization by the different groups.

⁴⁸ Lysyk, Bohmer, and Phelps, Alaska Highway Pipeline Inquiry, p. 91 quoting Statistics Canada.

⁴⁹ Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, pp. 18 and 46.

III. ADMINISTRATION AND MANAGEMENT OF LAND AND LAND USE

It has been stated that when considering northern lands it is necessary to distinguish between land administration and land use management.¹ Land administration deals with the disposition of land through the transfer of rights; land use management is carried out to minimize disturbance to land. This chapter discusses these aspects of administration and management of land and land use through a detailed review of the disposition of surface rights under the control of the federal and territorial governments, the territorial land use regulations, and the federal-territorial advisory committees on lands and land use.

DISPOSITION OF SURFACE RIGHTS UNDER THE CONTROL OF THE FEDERAL GOVERNMENT²

THE TERRITORIAL LANDS ACT

The Territorial Lands Act is the enabling legislation providing for the disposition of all surface rights and some subsurface rights to federal Crown land in the Yukon Territory.³ The Act provides for:

- 1 John K. Naysmith, Toward a Northern Balance, Department of Indian and Northern Affairs (1973), p. 10.
- 2 Based on Naysmith, Land Use and Public Policy in Northern Canada, pp. 61-62 and 73-75; Beauchamp, Land Management in the Canadian North, pp. 12-15; Department of Indian and Northern Affairs, The Acquisition of Crown Land in the Yukon Territory (1976); Department of Indian and Northern Affairs, "The Acquisition of Federal Crown Land in the Yukon Territory"; and Department of Indian and Northern Affairs, Procedures, Licensing, Legislation & All That, (December 1977).
- 3 The Yukon Quartz Mining Act and the Yukon Placer Mining Act provide for the lease of mining and mineral rights in Yukon. In the Northwest Territories, the Territorial Lands Act is the enabling legislation for disposition of all surface and subsurface rights to federal Crown land.

- (a) the sale and lease of lands (the appropriate regulations are found in the Territorial Lands Regulations);
- (b) quarries (covered by lease or permit under the Territorial Quarrying Regulations);
- (c) oil and gas permits and coal leases (covered by Canada Oil and Gas Land Regulations and Territorial Coal Regulations);
- (d) the management and leasing of timber rights (covered by the Territorial Timber Regulations).

Under the Act, the Governor-in-Council is given authority to sell, lease or otherwise dispose of territorial lands and make regulations authorizing the Minister to do likewise, subject to any limitations outlined by the Governor-in-Council. The Governor-in-Council can also make regulations and orders with regard to enquiries, including the examination of witnesses under oath and into questions affecting territorial lands. In addition to the above powers, the Governor-in-Council can set apart and appropriate territorial lands for various purposes including their use for certain public works, to fulfill obligations under Indian treaties, as national forests, public parks, game preserves or similar public purpose.

To administer the Territorial Lands Act and accompanying Territorial Lands Regulations, there is a Land Resources group within the Northern Affairs Program of DIAND (Figure 1). This group is concerned only with disposition and management of surface uses. The Supervisor of Lands receives all applications for land, administers leases and grants, and maintains a register of all federal Crown lands which have been alienated. These operational functions are performed in Whitehorse.

The procedure for applying for Crown land is outlined in the Territorial Lands Regulations. The main steps DIAND follows in processing most land tenure agreements is briefly summarized below and in Figure 3.

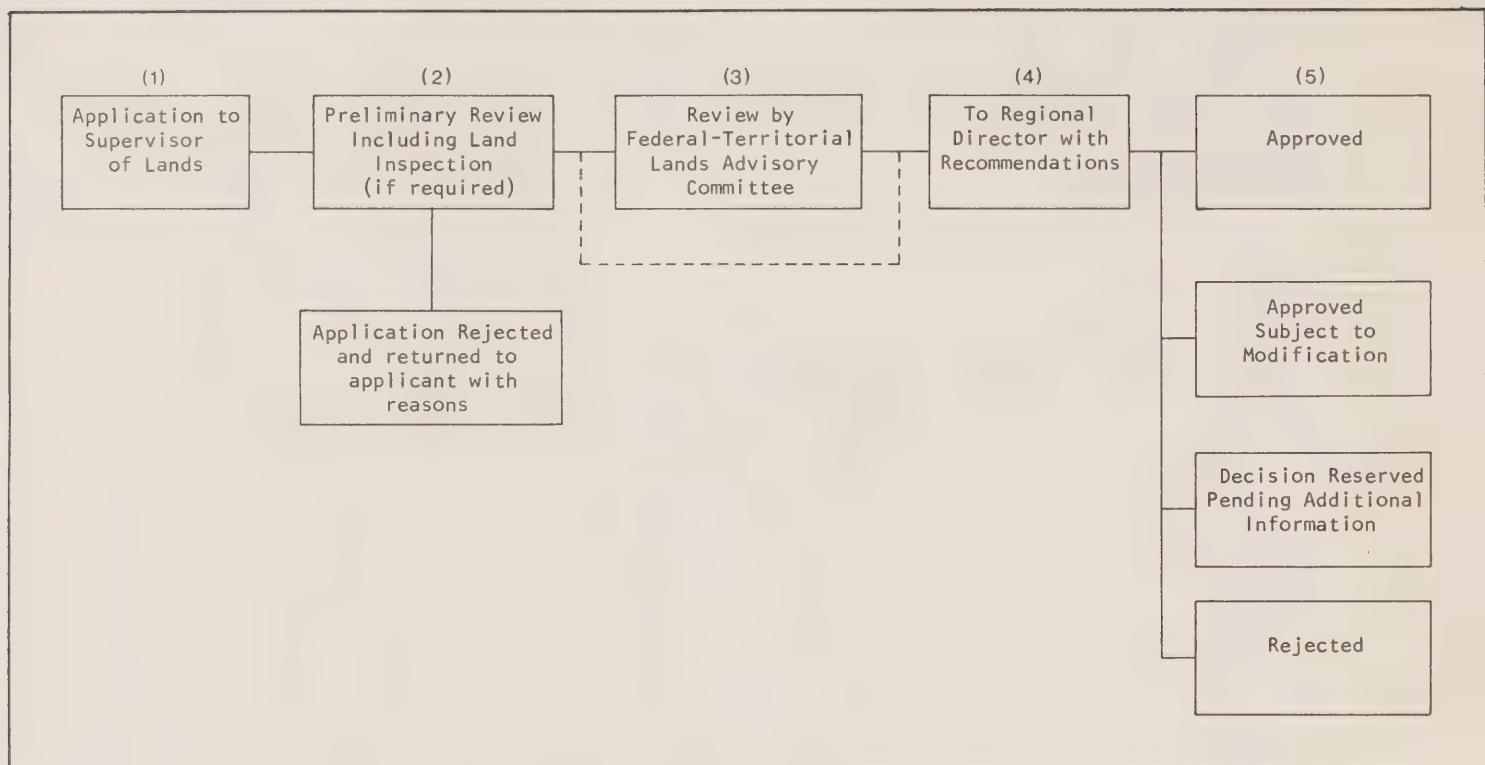
- (1) The first step is to submit an application for federal Crown land regardless of whether it is a private party or a government agency. The formal application is submitted to the Supervisor of Lands, DIAND, in Whitehorse, either by mail or in person. Applications are also accepted by Resource Management Officers (RMOs) throughout the territory (Watson Lake, Teslin, Haines Junction, Beaver Creek, Carmacks, Ross River, Mayo and Dawson).
- (2) The Supervisor of Lands and his staff conduct a preliminary review of the applications, including an inspection of the land, if required. At this point, the application can be rejected because it is contrary to government policy, or can be returned to the applicant for amendment and resubmission.
- (3) Where the application meets government requirements, it is forwarded to the Federal-Territorial Lands Advisory Committee⁴ for review and clearance by concerned departments of the federal and territorial governments. Where the application conforms to a special use as designated in an agreement between the two governments - e.g., cottage lot subdivisions - this review by the committee is eliminated.
- (4) The committee forwards the application with its recommendations to the Director, Yukon Region, Northern Operations of DIAND in Whitehorse.
- (5) The Regional Director can approve the agreement, reject it, or reserve a final decision until additional information is supplied by the Federal-Territorial Lands Advisory Committee.

Federal Crown land is made available to individuals under lease, lease agreement (with option to purchase) or sale agreement. The type of

⁴ The function, role and operation of this committee is outlined later in this chapter.

FIGURE 3

Land Tenure Agreement (Lease) of Federal Crown Land



Source: DIAND, Procedures, Licensing, Legislation and All That, p. 15.

Note: The numbers in brackets correspond to paragraph numbers on the preceding page.

agreement depends on the type of land for which application is made, its location and intended use. Other legal agreements such as easements, licence of occupation, map reservation, and Order-in-Council transfer are also available. In the absence of comprehensive plans specifying the most appropriate land use, the present trend is to make land available on a lease only basis. The terms of the lease range from three to 30 years, depending on the location and intended use.⁵

CLASSIFICATION OF LANDS AVAILABLE

The majority of applications for land in Yukon are for: primary residential, recreational residential, commercial and agricultural (market gardening, crops, grazing) use.

Primary Residential

Residential lands are normally confined to parcels within the general area of influence of a community (municipality or Local Improvement District) which is under the control of the Yukon government.

Applications for land outside community areas are referred to the government of Yukon for review and comment through the Federal-Territorial Lands Advisory Committee. The operation of this committee is explained later in this chapter.

Recreational Residential

The federal government's present policy is to make recreational cottage lots available for leasing in areas that have been designated for such purposes (approved subdivision). The reasons for this are to control haphazard development, and conserve prime waterfront land.

5 Section 10 of the Territorial Lands Regulations states: "Every lease of territorial lands shall be for a term of not more than thirty years, but the Minister may grant a renewal of the lease for a further term not exceeding thirty years."

Lands within a cottage subdivision are available under 30-year leases; an initial three-year term followed by renewal up to 27 years. The renewal term depends on the lessee meeting all conditions of the lease agreement during the initial term, including the requirement to commence within one year and complete within two years, construction of stipulated improvements of a specified value.

Only one leasehold lot per family household is permitted. Lease rental fees depend on the lot size, location and degree of amenities provided and are based on retirement of development costs of the subdivision. All subdivision lots are legally surveyed and access roads completed. Lease agreements contain provisions for a rental review at five-year intervals. Additional information on the disposition and use of land for recreational residential purposes is found in Chapter VIII.

Commercial

Most demand for commercial land is for tourist fishing lodges on water systems, and lodges, motels, cafés and garages on highways. For tourist lodges and similar enterprises, the policy is for a maximum water frontage of 183 m (600 ft.). Usually a parcel of land having a frontage of 122 m (400 ft.) and a depth of 61 m (200 ft.) is considered adequate, although larger parcels may be available in exceptional circumstances for commercial enterprises fronting on highways.

The land use is subject to stringent requirements within the first two years of the agreement. All companies wishing to acquire land in Yukon for purposes of operating a business or tourist establishment must be incorporated in Yukon, or registered as an extra-territorial company under the Companies Ordinance. Other territorial and government licences and permits may also be required.

Agricultural and Grazing Land

The enactment of the Territorial Lands Act removed the provision for homesteading (which was included in the Dominion Lands Act) in the Territories.

Since January 10, 1975, there has been a moratorium on disposition of federal Crown land for agricultural and grazing purposes. Consequently, only applications for market garden allotments are presently being accepted. The reasons for the moratorium are: (a) to stop the spread of agriculture to non-productive lands; (b) to enable the federal and territorial governments to jointly develop long-term disposal policies;⁶ (c) to identify agricultural areas offering the most chance of success in accordance with federal and territorial land use plans; and (d) to enable necessary soil and climatological surveys to be completed in order to identify potential agricultural areas. Long-term disposal policies for northern agriculture are now under preparation.

In the past, DIAND's policy has been to impose a standard 61 m (200 ft.) setback for all agricultural lands, including grazing lands, abutting highway rights-of-way and bodies of water. This was revised in 1977.⁷ The basic policy regarding the sale or leasing with option to purchase such setbacks remained unchanged. The modification was that the Regional Director of Northern Operations may, at his discretion, allow setback lands to be leased.

Agricultural (crops)

The size of the parcel made available to an applicant for agricultural purposes varies with the anticipated use; up to 259 ha (640 a.) may be made available for lease. The land is to be occupied for agricultural purposes only. Lease covenants include the requirement for the erection of necessary support buildings within two years of the lease agreement, and clearing and cultivation carried out on a graduated scale,

6 Section 16(v) of the Yukon Act gives the territorial government authority to make ordinances related to agriculture. Therefore, the federal role in agriculture is seen as being one of research and provision of information; whereas the territorial role is seen as being one of developing an agricultural policy for the territory.

7 Department of Indian Affairs and Northern Development, "Setbacks Applied to Agricultural Lands Disposed of Along Highway Rights-of-Way and Bodies of Water - Update of Policy". Policy Directive 2/77.

with a large percentage of the parcel in agricultural use by the end of the fifth year.

Grazing

The amount of land made available under a grazing lease is determined by the carrying capacity of the land. The maximum amount of acreage leased is 2 590 ha (6,400 a.). The lease may require that some fencing be completed but no other improvements of a permanent nature are allowed. The normal term for the lease of grazing land is three years. The annual rental rate is five cents per acre with a minimum rental of \$25 per year. The grazing lease contains a covenant that the lessee shall not use the land for purposes other than grazing.

Market Gardening

In reviewing applications for market garden land, applications are considered on the basis of previous agricultural experience, a feasible development plan for the land, and adequate financial resources. Applicants are requested to check initially with the territorial government about the availability of land for market gardening purposes. If the territorial government has no land available, then the federal government will consider the application.

Depending on the location and size of the designated market garden area, 4 ha (10 a.) is considered sufficient with no provision made for a residence. The land is made available under lease only. It is possible to extend the term of the original lease if the operation "proves up". In addition, in most designated market garden areas, an operator may apply to have an initial holding increased by 2 ha (5 a.) increments to a maximum of 10 ha (25 a.). The approval of each 2 ha (5 a.) increment is dependent upon whether full use has been made of the previous leased acreage.

GENERAL

Where territorial lands are leased only, there is no requirement for a survey and the application need only be accompanied by a proper sketch. Title to territorial land, however, cannot be issued until it has been properly surveyed and registered in the Land Titles office for the Yukon Land Registration District, in Whitehorse.

All dispositions are subject to certain reservations. For example, the Territorial Lands Act reserves to the federal Crown all mineral, fishing and water rights, the bed below any body of water and a 30.5 m (100 ft.) strip along the shoreline of any navigable water. Under the Territorial Lands Regulations, certain other reservations and conditions apply. For example, in every agreement for sale or grant, other than surveyed land in a townsite, a part of the land may be appropriated for the purpose of a public road (S.7(1)(a)). If the land sold is in excess of 4 ha (10 a.), it is sold only on condition that if the owner subdivides the land into townsite lots, one-third of the subdivided lots would revert to the Crown (S.7(1)(b)). With regard to leased land, Section 12 of the Regulations reserves all mines and minerals and full power to use and occupy the lands in order to extract the minerals. In addition, this section stipulates that every lease reserves all timber; the right to enter upon, work and remove any rock outcrop required for public purposes; rights-of-way and entry, as required to construct and maintain facilities for conveying water to mining operations; and the right to enter upon the land to install and maintain any public utility. As indicated previously, in almost all instances, land is initially occupied by lease. If the initial lease allows for the occupant to proceed to title through an agreement for sale, title is not granted until certain improvements specified in the agreement have been completed (e.g. construction of buildings).

An agreement for sale is usually issued for a term of five years and the purchase price of the land paid in five equal installments. Title may

be issued when conditions of the agreement have been met, the full purchase price paid, the parcel surveyed and the plan filed with the appropriate Lands Titles Office.⁸

Leases may be granted up to 30 years with a renewal for a further term not exceeding 30 years. If a renewal is not required or cannot be granted, the lessee may remove improvements from the land within a specified time period. The annual rental payment under any lease, other than a grazing lease, is not to be less than 10% of its appraised value; under a grazing lease the rate is not to be less than five cents per acre per year; and the rental payable under any lease shall in no case be less than \$15 per annum.

Section 6 of the Territorial Lands Act states "No territorial lands suitable for muskrat farming shall be sold." Section 7 of the Act sets out limits to the amount of land that may be sold or leased to any one person without the approval of the Governor-in-Council. Other than land suitable for grazing or muskrat farming, the limit is 65 ha (160 a.) for sale and 259 ha (640 a.) for lease to any one person without approval of the Governor-in-Council. No more than 2 590 ha (6,400 a.) of land may be leased (not sold) to any person for purposes of grazing or muskrat farming without the approval of the Governor-in-Council.

When title is granted to a parcel of land it is no longer under the control and management of the Minister of DIAND. The Territorial Lands Act no longer applies and it becomes subject to the Land Titles Act. From that point on, records on ownership are maintained by the Registrar of Land Titles. If the land should revert to the federal Crown through purchase or exchange, it again becomes subject to the Territorial Lands Act and a record of it is maintained in the federal Supervisor of Lands records once more. Once title has been granted, this land is then subject to the operation of all ordinances and regulations administered

8 Naysmith, Land Use and Public Policy in Northern Canada, p. 74.

by the territorial government. This also applies to leased land and all private land in Yukon.

DIAND disposes of land to private citizens, corporations, the territorial government and other federal departments. With regard to the latter, several federal agencies other than DIAND have administration and control of some public lands. These tend to be scattered parcels held for specific uses and, although they are held by federal Crown agencies, these lands are not "territorial lands" as defined in the Territorial Lands Act. In some instances, requests for land by federal agencies results in a "reservation" being placed on a piece of land, the area being reserved by a letter from the Supervisor of Lands, DIAND. The effect of this reservation is to allow the agency use of that property as long as it is required. When no longer required, the reservation can be cancelled and the land reverts to DIAND. Such reserved lands are not available for disposition to individuals. The use of the reservation system provides DIAND with a measure of control over the land which it would not have if an Order-in-Council transfer had been issued. In this latter case, the agency could dispose of it as it wished, unless reversion to DIAND is provided for. Order-in-Council reservations are used to reserve land for the territorial government.

Land may also be withdrawn from disposal under the Territorial Lands Act. This action requires an order giving the reasons for withdrawal (S.19(a)). In some cases areas are withdrawn where a public development is planned, in order to prevent disposal of lands to private persons who would then have to be compensated. This was done with the Aishihik power development and in the Kluane National Park area.⁹

Land may also be set aside under the Territorial Lands Act for purposes under DIAND's Indian and Inuit Affairs program and for any purpose

⁹ Beauchamp, Land Management in the Canadian North, p. 15.

considered to be for the general good of the native people. This land is not set aside as Indian reserves within the meaning of the Indian Act. It is generally for housing, cemeteries, school sites, camping and fishing sites, and is most often set aside in the form of a map reservation.

In addition, under the Territorial Lands Act, lands may be reserved by DIAND, for administrative purposes, to control development in a particular area. For example, in 1970 a map reservation was placed on land 305 m (1,000 ft.) on either side of the Carcross Road from the boundary of the Whitehorse metropolitan area to Carcross.¹⁰ This type of reservation is really for administrative purposes and is most often used to control ribbon development along highways or at highway intersections to control development. In instances where such a reservation may be entered in the records of DIAND, in the name of the government of the Yukon, no action would be taken on any applications for disposition of land within the reserved area without approval of the Commissioner.

DISPOSITION OF SURFACE RIGHTS UNDER CONTROL OF THE COMMISSIONER¹¹

Under Section 46 of the Yukon Act, certain land is appropriated to the territory and is subject to the control of the Commissioner-in-Council.

¹⁰ Part of the area near Carcross has since been brought under the control of the territorial Area Development Ordinance and an area of federal land around Carcross has been transferred to the administration and control of the territorial government under the Block Land Transfer program. Further information on this area and ordinance is provided in Chapter IV.

¹¹ Based on Naysmith, Land Use and Public Policy in Northern Canada, pp. 76-77 and 82-83; Beauchamp, Land Management in the Canadian North, pp. 40-42, and Government of the Yukon Territory, Department of Local Government, "Land, Its Development and Disbursement: A Discussion Paper" (November 1977).

This clause, in effect, gives the territorial government the authority to administer the surface rights of certain lands, commonly known as "Commissioner's lands", subject to certain federal reservations, as cited in the Territorial Lands Act. These lands are located primarily in and around communities.

The Commissioner's lands in the Yukon Territory are administered under the Yukon Lands Ordinance. The lands to which this ordinance applies are those described as: "...all properties in the Territory that are vested in Her Majesty in right of Canada but the right to the beneficial use or the proceeds of which is appropriated to the Territory and is subject to the control of the Commissioner-in-Council" (S.3(1)). It is clear that it is the surface rights only, to which the ordinance applies.

Subject to the ordinance and regulations, the Commissioner may sell, lease or otherwise dispose of Commissioner's lands and may make those regulations and orders deemed necessary in order to carry out the provisions of the ordinance.

The Lands Ordinance and accompanying Lands Regulations are administered by the Department of Local Government. Within the Department, the Municipal and Community Services Branch plans, develops, and services lands to municipal standards while the Lands Branch is responsible for the registry, mapping and disposal of lands.

GENERAL CONDITIONS REGARDING DISPOSAL OF COMMISSIONER'S LANDS

Commissioner's lands may be available for sale by agreement for sale or by lease. The general policy regarding disposal of lands was outlined in a discussion paper prepared by the Department of Local Government in the fall of 1977. In that paper it stated: "It has become unwritten policy to restrict leases to situations where permanent buildings are not to be constructed on the land. In almost all instances it has become policy to sell lands where permanent structures are required.

In addition, these lease terms are much more specifically defined and more rigidly enforced than in previous years.

There has also been some effort to restrict leases from areas where planning is necessary prior to any alienation of lands and to avoid issuing new leases for grazing and agricultural lands.¹²

CLASSIFICATION OF AVAILABLE LANDS

Residential Land for Sale

The Territorial government develops residential lands in municipalities and communities in four categories: house lots, mobile home lots, duplex lots and acreage residential (1-5 acres) lots. The regulations allow for sale on a first come first served basis, or by lottery, although the former method is usually adopted.

Lots which are available for sale on a first come first served basis are sold in the following preferential order:

- (a) to qualified individuals for their own residential purposes;
- (b) to government agencies;
- (c) to developers, realtors, building contractors and individuals not qualifying under (a); and
- (d) general sale.

In order to be included in the "qualified individual" category, an individual must not have purchased a lot from the Commissioner during the preceding two years and must be purchasing the lot for the purpose of providing accommodation for himself and his family (i.e. rather than for speculative purposes).

¹² Government of the Yukon Territory, Department of Local Government, "Land, Its Development and Disbursement: A Discussion Paper", p. 24.

Any lots remaining after the initial sale are placed on over-the-counter sale and are publicly advertised on a monthly basis. The Commissioner may, however, reserve a portion of the lots for sale to developers, realtors and building contractors either on a first come first served basis, or by lottery. With regard to lots for sale by lottery, the same rules apply and choice of lots is in the order in which names are drawn in the lottery.

Individuals cannot buy more than one lot, but two contiguous lots may be purchased if they are to be developed as a single home site. No individual may hold any more than one undeveloped lot in a community or municipality, although a developer, realtor or building contractor may hold up to five undeveloped single family residential lots.

A person whose application is successful enters into an agreement for sale calling for the purchase price to be paid in full and the exterior of the dwelling to be completed within the period of one year. For mobile home lots, the mobile home must be placed on the lot with a foundation meeting building code requirements and finished skirting. There is provision for a six-month extension where the purchaser has a building permit and approved financing for the dwelling to be constructed.

Lots are sold at the cost to develop. This usually includes the cost of planning, surveying, hydro, telephone, piped water, piped sanitary sewer and paved roads with curbs, gutters and sidewalk on one side. Acreage residential lot services include only survey, gravel road and primary hydro and telephone lines.

Agreements for sale are not transferable and upon cancellation, an administrative charge based on one-half of 1% per month is deducted from the down payment, along with any taxes that may be due. At present, only residential land sale procedures are clearly defined by regulations.¹³

13 Lands Regulations, S. 26-43.

Commercial, Industrial and Multiple Dwelling Lots for Sale

Land for commercial, industrial and multiple dwellings is developed using the same process as residential land. Commercial and multiple dwelling lots are fully serviced (sewer, water, etc). Industrial sites may vary from no servicing to fully serviced. While the sale procedures for these types of land may vary from time to time, it has been general practice to sell on a bid basis. After the initial sale date, any unsold lots are available for sale and advertised on a monthly basis. Lots that have been taken off the market for any reason are re-advertised on a tender basis.

Purchasers are required to enter into an agreement for sale calling for a specified value of building improvements (\$20,000 and upwards) to be placed on the lot within 18 months.

As in the case of residential lands, agreements for sale are non-transferable. Upon cancellation, an administration fee of 1.5% per month is deducted from the down payment, together with any taxes that are due.

Leases

As mentioned previously leases are usually restricted to uses such as public recreational, public utilities and summer residential where improvements are not necessarily permanent in nature.

The government's policy is not to issue new grazing and agricultural leases pending adoption of a formal agricultural policy. Existing leases are renewed where the conditions and terms have been performed and observed. Annual lease fees are based on 10% of appraised bare land value.

FEDERAL-TERRITORIAL LANDS ADVISORY COMMITTEE

Because of the need for close cooperation between the federal and territorial land disposal programs, a committee known as the Federal-Territorial Lands Advisory Committee has been established. The objectives of the committee are:

- (a) to coordinate mutual action and the exchange of information between the federal and territorial governments with respect to the administration of federal Crown lands, including the review as required of applications for federal lands;
- (b) to review policy and regulatory proposals initiated by the territorial government that will have an effect on the administration and use of federal Crown lands, and to review policy and regulatory proposals initiated by the federal government that will have an effect on the administration and use of territorially controlled lands;
- (c) to provide a forum for coordination at the regional level of the interests and concerns of the native peoples with respect to the administration of federal Crown lands;
- (d) to provide a forum for the exchange of ideas related to improving the quality of land administration services provided to the general public by the adoption of complementary land administration methods, procedures, legislation and regulations by both governments and to make recommendations accordingly; and
- (e) to identify and recommend areas for special management programs, located outside of Block Land Transfer areas, so as to ensure controlled growth of highway, agricultural and waterfront developments, to provide advice on the suitability of planning reports prepared for such programs, and to establish guidelines for the routine processing of applications in designated areas.

The committee is chaired by the Assistant Regional Director, Renewable Resources, Northern Operations Program of DIAND in Whitehorse. Other DIAND members are the Regional Manager, Land Resources; Supervisor of

Lands; and Regional Director, Indian and Inuit Affairs. Territorial members are the Director, Department of Local Government; Director, Wildlife Branch; and Director of Tourism. The Program Advisor to the Assistant Regional Director, Renewable Resources, DIAND, serves as secretary. The membership of the committee reflects those agencies most likely to be affected by matters of land alienation. The chairman may authorize other federal and territorial officials to attend when their special knowledge is required. Other interested groups or land applicants may be invited to attend under special circumstances. The committee meets monthly.

As the quality of the comments the committee can provide are reflective of the data available to it, the Regional Manager of Land Resources is attempting to develop a means for systematizing data brought forward for consideration by the committee to assist in better land management decisions being made. A proposal is being made to provide technical support for the committee. This support staff would be drawn from established government agencies and would have the functions of research and inspection. Research would be provided by the Supervisor of Lands, DIAND, with the assistance of appointed contacts in other federal and territorial agencies. A Coordinator of Technical Support would be responsible for requesting inspection services from the Lands Inspector and the appropriate Resource Management Officer (RMO). A summary report, combining the background research and RMO inspection report would be prepared by the coordinator. Areas of significant concern would be highlighted and the report submitted to the advisory committee for information.

The inquiry into the proposal to build a gas pipeline along the Alaska Highway in Yukon heard evidence that there was an informal land freeze in Yukon. They concluded that there was a shortage of lots in some communities, but that the problem was one of a lack of serviced lots rather than any deliberate land freeze.¹⁴ In the report, the

¹⁴ Lysyk, Bohmer, and Phelps, Alaska Highway Pipeline Inquiry, p. 112.

inquiry commissioners also pointed out that applications for federal Crown lands are processed by the Federal-Territorial Lands Advisory Committee that operated under the following constraints:

1. No grants of agricultural or grazing lands will be made, pending the completion of certain studies and the formulation of a territorial government agricultural policy. Grants for market gardens are possible.
2. Cottage lots will be made available only in planned subdivisions. One subdivision with over 50 lots came onto the market earlier this year [1976]. Certain proposed cottage subdivisions have been stopped because the land claims negotiators have expressed interest in the area.
3. Few residential lands outside existing communities are granted because of the Government of Yukon's desire to minimize the costs of services by maximizing settlement within existing communities.
4. Applications for land for commercial operations outside of existing communities are thoroughly reviewed on the grounds of economic viability and of their compatibility with adjacent land use. Few such applications are received.
5. Decisions for industrial projects, such as mines, are normally made at another level.¹⁵

These constraints tend to ensure that federal Crown land is not disposed of in a haphazard fashion. In addition, it reassures parties involved in land claims settlement that prejudice to land selection is being avoided. In fact, prior to release of any new parcels of land, where the Yukon region of DIAND's Northern Operations Program has direct knowledge of native interest, such applications are referred to the Office of Native Land Claims in Ottawa-Hull to confirm any interest in the subject lands. If a native interest is confirmed, the land would not be made available for release or development.

15 Ibid.

SUMMARY OF FEDERAL AND TERRITORIAL ADMINISTRATION OF THE LAND RESOURCE

Land in Yukon is administered under three categories at present.

1. Lands under the administrative control of the territorial administration (Commissioner's lands). These are lands that have formally been appropriated to the territorial administration pursuant to section 46 of the Yukon Act or by Orders-in-Council transfer.
2. Land designated as a development control zone under the Area Development Ordinance of the Yukon government (additional details on this ordinance are provided in Chapter IV). It is a form of land use control legislation that allows the Commissioner to make regulations for the orderly development of an area respecting zoning and the allocation of land for agricultural, residential, business, industrial, educational, public or other purposes. This ordinance applies to all land, not only to those lands known as Commissioner's lands. Although under this ordinance the territorial government controls zoning, it has no direct control over dispositions, since title is still issued by the federal government.
3. The remainder of the land in Yukon (the majority of the land) is under the control of the federal government and is administered by DIAND.

TERRITORIAL LAND USE REGULATIONS¹⁶

In order to protect land in instances where land use tenure agreements were not required but short term land use operations were being carried out (e.g. control of the rapid increase in the numbers of exploration programs), the Territorial Lands Act was amended in June 1970 and the Territorial Land Use Regulations promulgated November 24, 1971.

¹⁶ Based on Naysmith, Land Use and Public in Northern Canada, pp. 62-64; Naysmith, Toward a Northern Balance, pp. 10-12; and Territorial Land Use Regulations SOR/71-580, SOR/77-210.

The Territorial Lands Act contains only one major revision to the original Act of 1950.¹⁷ This revision made in 1970, allows the Governor-in-Council to "...set apart and appropriate any territorial land in that area as a land management zone." This was done where deemed necessary "...for the protection of the ecological balance or physical characteristics of any area in the Yukon Territory or the Northwest Territories ..." The amendment also authorized the Governor-in-Council to make regulations respecting protection, control and use of territorial lands, and to issue permits for the use of the surface of the land within a land management zone. In addition, the Land Use Regulations describe the terms and conditions which may be included in a land use permit required for any operation carried out within a land management zone.

The 1970 amendment to the Territorial Lands Act and the 1971 Land Use Regulations, represent a major departure from previous Canadian government land legislation, dating back to the enactment of the Dominion Lands Act in 1872. Previous legislation was designed to transfer surface and subsurface rights and to provide a legal basis for setting aside specific areas for particular use such as public parks. By providing for regulations designed to minimize the detrimental effects of land use operations on the land the 1970 amendment changed the spirit of the Act from that of a vehicle for allocating rights to one which also protected the land surface.¹⁸

The Land Use Regulations apply to territorial lands, as defined in the Territorial Lands Act, which are vested in the Crown, or of which the federal government has power to dispose, and which are now under the control, management and administration of the Minister of DIAND. In other words, they do not apply to land alienated (e.g. leases), land transferred to the Territory (Commissioner's land), or land transferred by Order-in-Council to other federal departments. However, they do apply to land listed in DIAND's records as being under map reservation.

17 This amendment is contained in Sections 24 to 28 of An Act to Amend the Yukon Act, the Northwest Territories, Act and the Territorial Lands Act; ch. 48 (1st Supp.) 1969-70, c. 69.

18 Naysmith, Land Use and Public Policy in Northern Canada, p. 63.

The Territorial Land Use Regulations were promulgated in November 1971. These regulations were primarily designed to control all work or activity including the use of heavy vehicles, establishment of large camps, the extensive use of explosives, and the clearing of lines, trails and rights-of-way. These activities were defined so that typical exploration work such as seismic, well drilling, work on mining and mineral claims, and access road construction required a land use permit. The regulations were organized into three parts: (1) general conditions applying to land use operations in all parts of the territories; (2) Land Management Zones and the land use permit system devised to control activity in them. As originally drawn up, Land Management Zones included the northern Yukon, parts of central and southern Yukon, together with much of the districts of Franklin and Mackenzie, in the Northwest Territories; (3) the role of land use inspectors in administering and enforcing the regulations, default of the operator, suspensions, cancellation of permits and appeals.

Based on the operating experience gained over five years, it was decided to revise the regulations. Among the reasons perceived for the need for revision were: the need to extend the permit system to cover the entire Yukon and Northwest Territories; many small operations could not be controlled under the definition of a land use operation; need for streamlining administrative and enforcement procedure; and need for more time for thorough review by the Land Use Advisory Committee, the DIAND field offices and community consultation. Therefore, the Territorial Land Use Regulations were revised and promulgated March 23, 1977.¹⁹ A copy of these regulations is included in Appendix I.

These revised regulations contained the following major changes:

- (a) extension of the Land Management Zones to include all of Yukon and Northwest Territories;

¹⁹ SOR/77-210 Canada Gazette, Part II, Vol. III, No. 6, March 32, 1977.

(b) introduction of a two-permit system; A and B permits. The designation of what constitutes an A permit or a B permit is defined under Sections 8 (a to h) and 9 (a to f), respectively. Table 4 summarizes the differences between A and B permits. The Class A permit essentially replaces the previous land use permit for operations where more detailed consideration by the Land Use Advisory Committee²⁰ is necessary, and for all significantly large land use operations. The Class B permit applies to smaller land use operations (primarily those that would not have been covered under the previous regulations) which occur in relatively stable terrain where full consultation is not a requirement. In the previous system, permits were required to be issued within 30 days; the review period for Class A permits is a maximum of 42 days. With respect to a Class A permit, the Engineer (Assistant Regional Director, Renewable Resources, Northern Operations, DIAND, Whitehorse) must:

1. issue the permit;
2. notify the applicant that further time is required to issue the permit and give the reason;²¹
3. notify the applicant in writing that he has ordered further studies and state the reasons;
4. refuse to issue a permit and give the reasons.

With respect to Class B permits, within 10 days after receipt of an application for a Class B permit, the Engineer must:

1. issue the permit;
2. refuse to issue the permit; or
3. where he deems necessary, notify the applicant in writing that his application for a Class B permit will be considered as an application for a Class A permit.

²⁰ The function, role and operation of this committee is outlined later in this chapter.

²¹ When the applicant is told that more time is required, the Engineer must respond within 42 days as per 1,3 or 4. Where further studies have been ordered as per 3, the Engineer must comply with 1 or 4 within 12 months.

TABLE 4
DISTINCTION BETWEEN CLASS A AND CLASS B LAND USE PERMITS

ACTIVITY	CLASS A PERMIT	CLASS B PERMIT
Explosives	More than 150 kg (330.7 lbs.) in any 30-day period.	More than 50 kg (110.2 lbs.) but less than 150 kg (330.7 lbs.) in any 30-day period.
Use of Vehicles	Any vehicle exceeding 10 t (22,046 lbs.) net weight.	Any vehicle of 5 t to 10 t (11,023 lbs. to 22,046 lbs.) net weight or exerting a pressure of more than 35 kPa (5.076 lbs./in. ²).
Drilling	Equipment with an operating weight of more than 2.5 t (5,511.5 lbs.), not including drill rods, bits, pumps, etc.	Equipment weighing 500 kg to 2 500 kg (1,102.3 lbs. to 5,511.5 lbs.) excluding drill rods, etc.
Campsites	In use for more than 400 man-days	In use for 100-400 man-days by more than two people.
Fuel Caches	Any cache of more than 80 000 L (17,598 imperial gal.), or any single container with more than 4 000 L (880 imperial gal.)	Any cache of 4 000 L (880 imperial gal.) to 80 000 L (17,598 imperial gal.), or any single container of 2 000 - 4 000 L (440-880 imperial gal.).
Earth moving and clearing; hydraulic prospecting	Use of any self-propelled or stationary machinery.	
Preparation of lines, trails, rights-of-way	Line, trail or right-of-way more than 1.5 m (4.9 ft.) wide and 4 ha (9.9 a.) in area.	Line, trail or right-of-way more than 1.5 m (4.9 ft.) wide, but less than 4 ha (9.9 a.) in area.

Source:

DIAND, Procedures, Licensing, Legislation & All That, p. 7 and Territorial Land Use Regulations, SOR/77-210.

- (c) a permit is required for fuel storage. Where only a small quantity is involved (more than 400 L and less than 4 000 L, or is located on territorial land for which a permit is not required) the fuel cache must be registered with DIAND to ensure that placement and ultimate removal of fuel and containers conform to regulations;
- (d) the powers of the land use inspector were increased to include the authority to suspend a land use operation where the operator consistently violates the terms and conditions of the permit;
- (e) to meet the concerns of the mining industry, anything done in the normal course of prospecting or locating a mineral claim that does not involve the use of machinery is exempt.

The application of the Land Use Regulations is limited in two major respects: (1) they do not apply to mining activity in Yukon since the Territorial Lands Act does not take precedence over the Yukon Placer Mining Act nor the Yukon Quartz Mining Act; (2) they do not apply to any lands the surface rights of which have been disposed of by the Minister of DIAND. This includes lands which have been leased or sold and those lands transferred by Order-in-Council to the Commissioner.²² In addition, the regulations do not apply to anything done by a Yukon resident in the normal course of hunting, trapping or fishing; or to a timber operation conducted pursuant to Section 8 of the Territorial Timber Regulations.

ADMINISTRATION OF THE LAND USE REGULATIONS²³

The Land Use Regulations are enforced by members of DIAND's Northern Operations Program. The Assistant Regional Director, Renewable Resources, DIAND, Whitehorse, is referred to as the "Engineer" in the regulations. The Engineer is assisted by a land use administrator (Head of Land Use Unit) who is functionally located in the Land Resources group.

22 Naysmith, Land Use and Public Policy in Northern Canada, p. 64.

23 Based on Beauchamp, Land Management in the Canadian North, pp. 30-34; Peter J. Usher and Grahame Beakhurst, Land Regulation in the Canadian North (November 1973); pp. 72-77; and Territorial Land Use Regulations.

An application for a land use permit is submitted to the Engineer, in duplicate, on special forms for that purpose. The application must be accompanied by the corresponding application fee (\$20 for a Class A permit, \$10 for a Class B permit) and land use fee (where lands proposed to be used as shown on the preliminary plan exceed 2 ha, for each ha in excess of this, \$20 south of 65° north latitude, \$12 north of 65° north latitude). At the time of application for a permit, the applicant may also be requested to pay a security deposit not exceeding \$100,000 (S. 36 (1)). However, in practice bonds are generally not requested. If damage has been done and not rectified, or if the permittee has not complied with all terms and conditions of the permit or in the Land Use Regulations, part of the security deposit may be retained and used to repair or restore land that has been damaged.

The applicant must also submit a preliminary plan showing the area and location of the lands proposed to be used; the appropriate location of all existing, as well as new, lines, trails, rights-of-way and cleared areas proposed to be used in the land use operation; buildings, campsites, air landing strips, air navigation aids, fuel and supply storage sites, waste disposal sites, excavation and other works and places proposed to be built or used during the land use operation; and bridges, dams, ditches, railroads, highways and roads, transmission lines, pipelines, survey lines and monuments, air landing strips, streams and other features, or any other structures or works that may be affected by the land use operation (F.22 (2)(a)(b)). Similar information is required to be submitted on a final plan within 60 days of completion of the operation or expiration of the permit.

Prior to issuing a permit, the Engineer may order an inspection of the lands proposed to be used. He may also require the applicant to provide information and data concerning the proposed use of lands, as well as the physical and biological characteristics of the land in order to allow him to evaluate the effects of the proposed land use operation (S.23(1)).

The permit may include terms and conditions related to the location and area of lands that may be used; timing of operations; type and size of equipment that may be used in the land use operation; the type, location, capacity, and operation of all facilities to be used; the methods to be employed in controlling or preventing ponding of water, flooding, erosion, slides and land subsidence; use, storage, handling and disposal of chemical or toxic material; the protection of wildlife and fisheries habitat; the protection of objects and places of recreational, scenic and ecological value; security deposit; establishment of petroleum fuel storage facilities; methods and techniques for debris and brush disposal; and any other matters necessary for the protection of the biological or physical characteristics of the land (S.31 (1)). In practice, a standard set of terms and conditions has been developed and for normal land use operations this standard is usually applied with minor alterations to suit the particular application.

There are certain general conditions under the regulations which apply to all proposed land use operations, subject to the terms and conditions of the permit or written authority of the land use inspector. For example, every permittee must replace all material moved during the course of excavation (other than rock trenching) and must level and compact the area of excavation (S.12). After completion of the land use operation, the permit area must be restored as nearly as possible to the same condition as it was prior to commencement of the land use operation (S.18). All buildings, machinery, equipment, materials and fuel drums or storage containers, used in connection with the land use operation, must be removed on completion of the land use operation or, with prior written approval, be left at locations identified by the Engineer (S.19). A detailed list of requirements under the Land Use Regulations can be found in Appendix I.

The terms and conditions of the permit may be modified upon receipt of a written request from the permittee (S.31(2)). The Engineer must notify the permittee of his decision and reasons within 10 days of receipt of such a request (S.31(3)).

Every permit also has a specific time period for which it is valid. This period cannot exceed two years (S.31(4)). The permit may be extended for up to one year (S.31(5)).

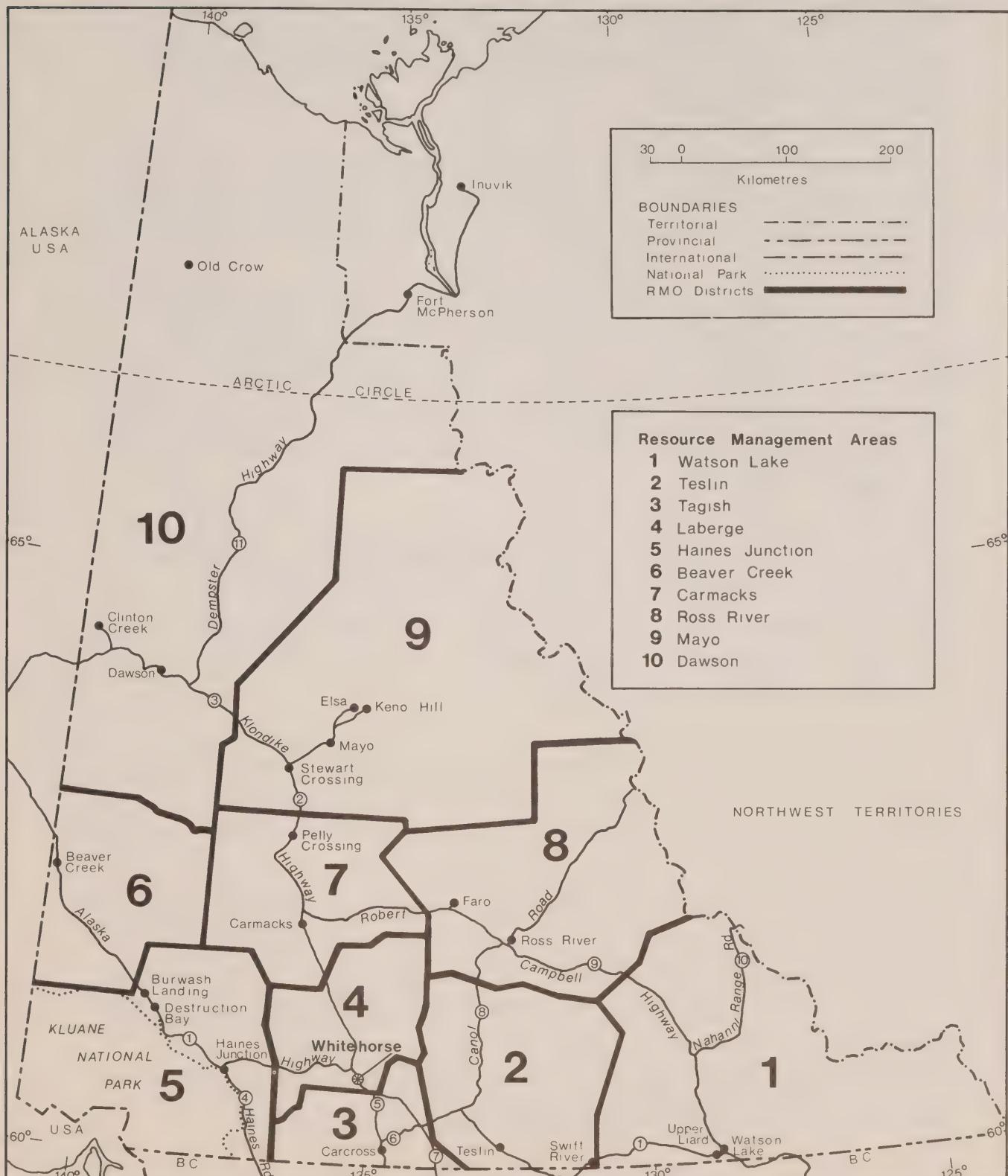
After submission of a final plan, and if the Engineer is satisfied that the permittee has complied with all terms and conditions of the permit and provisions of the Land Use Regulations, the Engineer issues a letter of clearance to the permittee (S.37).

Enforcement of regulations in the field is carried out by land use inspectors designated by DIAND. This work may be carried out by the chief land use inspector of the Land Resources group in Whitehorse. However, it is normally carried out by the Resource Management Officers (RMOs), who have been designated land use inspectors. (Map 3 indicates Resource Management Officer district boundaries). With respect to oil and gas exploration operations carried out under a land use permit, the land use inspectors are responsible for all aspects of land use regulations (e.g. access routes, location, fuel storage, garbage disposal, etc.). An Oil and Gas Conservation Engineer is responsible for engineering and safety at the drill site. For timber operations, the RMOs are also the inspectors, so there is no problem in achieving an integrated approach to cover all phases of this type of operation.

A land use inspector has the authority to enter any operation site in order to inspect it and determine whether or not there is compliance with the terms and conditions of the permit and Land Use Regulations. Where the inspector feels that there has not been compliance, he is to inform the permittee. If the non-compliance continues, he informs the permittee that if the default is not corrected within a specified time, he may order suspension of all or part of the operation (S.41(1) and (2)). Where the land use operation is suspended and the permittee refuses or fails to correct the default, the permit may be cancelled by the Engineer (S.42(1)).

MAP 3

Resource Management Officer District Boundaries



Source: DIAND, "Group Sheet Index, R.M.O. Districts, Fire Suppression Priority Zones and Mining Districts Map of Yukon Territory." Scale 1:1,267,200. Whitehorse: November 14, 1975.

The inspector may allow the operation to continue when he or the Engineer is satisfied that the default has been corrected, unless, in the meantime the permit has been cancelled (S.41(3)). If the default has not been corrected, the Engineer may take such action as is necessary to correct the default, and recover the costs from the permittee (S.41(4) and (5)).

A permittee may apply to discontinue an operation before expiration of the permit, or he may apply to the Engineer to assign a permit to another party. The Engineer may approve all or part of the assignment (S.43 and 44).

There is an appeal procedure provided for in the regulations whereby an applicant for a permit or a permittee may, within 30 days after any decision, direction, or order, made by the Engineer or inspector, appeal to either the Minister of DIAND, or to a senior officer of DIAND (other than the Engineer) authorized by the Minister under the appeal procedure to represent him (S.45).

For operations which straddle the Yukon-Northwest Territories border, the practice is to address the application to the official of the territory containing more than one-half of the proposed operation. In this case a single permit is issued and inspections are carried out from the nearest office in either territory.

A total of 343 land use permits were applied for from the time that the Territorial Land Use Regulations went into effect (November 1971), until the new regulations came into effect (March 1977).

Table 5 provides a breakdown of the Class A and B permits issued under the new regulations for the period March 10, 1977, to May 15, 1978. As can be observed from this table, the vast majority (86%) of the permits issued over a 14-month period, since the introduction of the two-class permit system, have been A permits. Of these Class A permits, over one-third (36.7%) have been for government projects. The majority of the Class B permits (60%) have been for campsite staging areas.

TABLE 5

LAND USE PERMITS ISSUED MARCH 10, 1977 to MAY 15, 1978

TYPE	NUMBER OF PERMITS AND CLASS					
	CLASS A		CLASS B		TOTAL	
	No.	%	No.	%	No.	%
Oil & Gas Drilling	2	0.9	0	-	2	0.8
Seismic	3	1.4	0	-	3	1.2
Mining (drilling)	7	3.2	0	-	7	2.7
Mining (geophysical)	2	0.9	1	2.9	3	1.2
Roads (private construction)	36	16.3	3	8.6	39	15.3
Airstrips	1	0.5	1	2.8	2	0.8
Government Projects a	81	36.7	2	5.7	83	32.5
Power Lines	1	0.5	2	5.7	3	1.2
Campsite Staging Areas	25	11.4	21	60.0	46	18.0
Hydro Projects	3	1.4	0	-	3	1.2
Research Projects	2	0.9	0	-	2	0.8
Quarrying	21	9.5	0	-	21	8.2
Gas Gathering Systems	1	0.5	0	-	1	0.4
Woods Operations	21	9.5	1	2.9	22	8.6
Miscellaneous b	5	2.3	0	-	5	2.0
Applications but no permit issued or permit not required	9	4.1	4	11.4	13	5.1
 TOTAL	220	100.0	35	100.0	255	100.0

a Includes permits for gravel crushing, temporary grading station, culvert installation, etc.

b Includes, for example, cleanup operations of old military sites.

Source:

Land Use Unit, Land Resources Group, DIAND, Whitehorse.

It is estimated that about 70% of the Class A permits during this period (March 10, 1977 to May 15, 1978) were issued within 10 days of application for a permit. Of the 35 B permits issued during this same period, none was issued on the same day as applied for, but about one-third were issued the day following application.

LAND USE ADVISORY COMMITTEE

When the Territorial Land Use Regulations were drafted it was recognized that there was a need for an organization to advise the Engineer on the administration of the regulations. The Land Use Advisory Committee was formed. It was not based on legislation but was formed at the request of the Minister of DIAND. Its main purpose is to assist the Engineer in assessing applications for land use permits by providing additional environmental data and advising on conditions to be included in permits issued.

The committee is chaired by the Assistant Regional Director, Renewable Resources, Northern Operations, DIAND, in Whitehorse. He is designated the Engineer under the Regulations. The committee presently is comprised of representatives from the federal and territorial governments. The federal members are from the Department of the Environment, who are represented by members of the Canadian Wildlife Service, Environmental Protection Service and Fisheries Service; and DIAND, who are represented by members of the National Parks Branch, and from the relevant agencies in the renewable and non-renewable resources groups of the Northern Operations Program. The territorial government representatives are: Director, Department of Highways and Public Works; Director, Wildlife Branch; Chief, Parks and Historic Sites; and Director, Department of Local Government. The chairman may invite representatives of other agencies to attend when their special knowledge or expertise is required.

It should be noted that the committee is strictly an advisory group and has no power itself to make decisions on applications that come before it.

With the introduction of the two-class permit system discussed previously, the problem facing the Land Use Unit of DIAND and the Advisory Committee is the handling of the applications. Upon receipt of an application, it is thoroughly reviewed by the land use staff of DIAND, in Whitehorse, against the definitions of A and B permits to verify what the actual class of permit should be.

Where an application is considered to have only minor "A" classification concerns²⁴ or is a routine operation, a permit is issued within 10 days containing "agreed to standard conditions" as developed by DIAND and the Land Use Advisory Committee. An example of such a permit application would be for a soil testing program that involves the use of a machine exceeding a minimum weight (2.5 t.). Consultation on the above would be by telephone between DIAND's Land Use Unit and agencies with a direct concern. The agencies contacted have the option of approving the issuance of a permit, adding specific conditions to the permit, requesting that the permit be delayed until a further agency review has been completed, or requesting that the application be placed before the Advisory Committee for consideration. Where, in the opinion of the Land Use Unit, the Class A permit application is non-routine in nature, where there are definite environmental concerns, or further time for consultation is required, Section 25(1)(b) of the Territorial Land Use Regulations is applied, the applicant is advised that further time is required to issue a permit, and the application is presented to the Advisory Committee for consideration and advice.

With respect to applications for Class B permits, no consultation with members of the Advisory Committee is involved if, in the opinion of the Land Use Unit, the permit has no justification for reclassification to an A permit, the permit is issued within the 10-day specified period.

24 Minor "A", is an administrative distinction used by DIAND. Only one of the elements defining an A permit applies and as such, it is not considered to be of significant environmental implications.

For handling these types of permits, standard conditions have been developed by DIAND and the Land Use Advisory Committee for routine operations. However, non-routine operations, or operations in environmentally sensitive areas, are referred to relevant members of the Committee for input much the same as for consultations regarding Class A permits.

Subcommittees may be established under the Committee from time to time to examine a specific problem, e.g. solid waste disposal.

With regard to consultation with native groups and communities, copies of all permit applications are sent on a regular basis to the Council for Yukon Indians (CYI). With regard to activities thought to have an impact on the community of Old Crow or the north coast of the territory, consultation is carried out with the community of Old Crow.²⁵

Figure 4 provides a schematic diagram of the application and review procedure for a land use permit.

LAND USE ISSUES

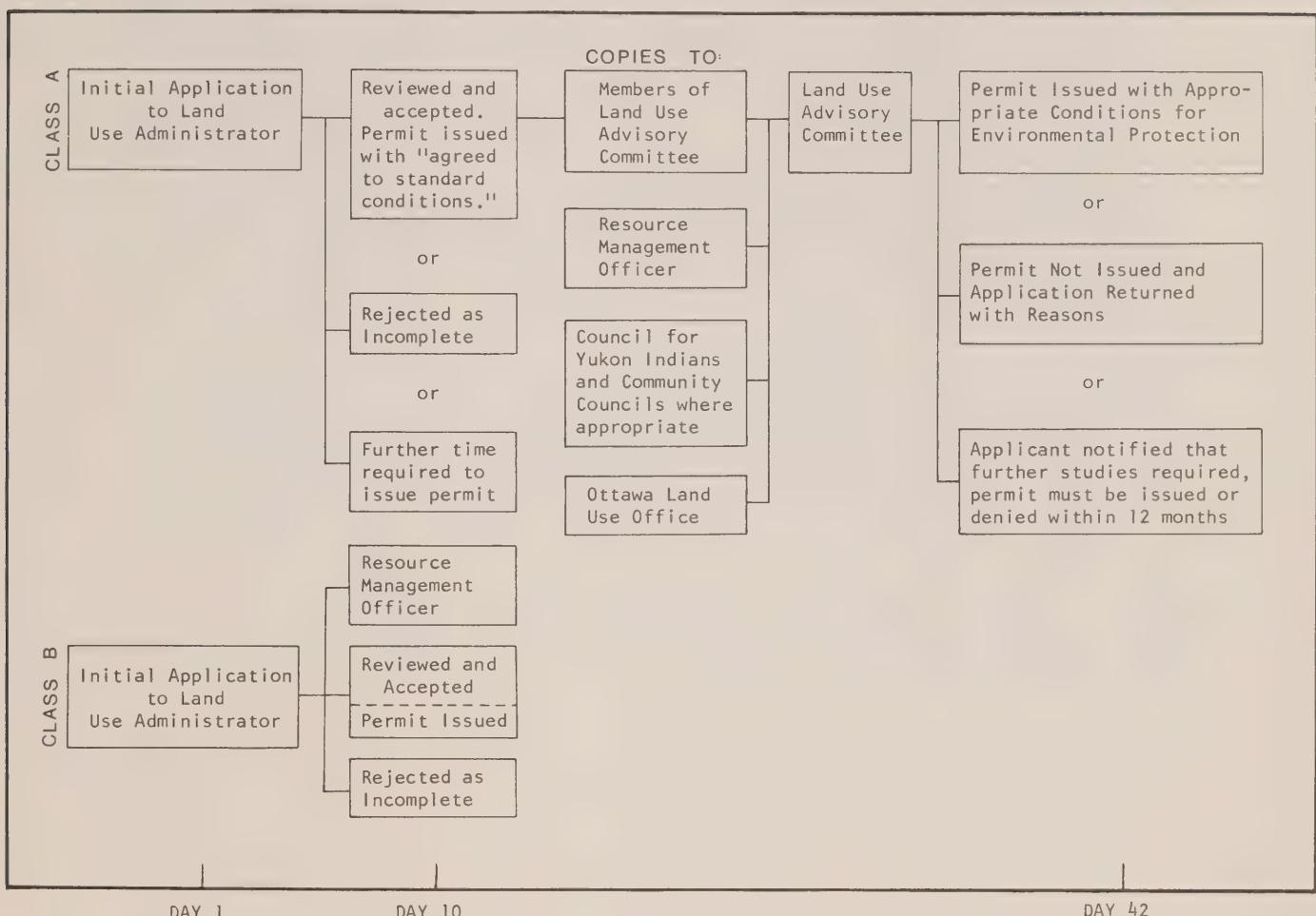
Issues and problems associated with the administration and management of land and land use are:

- uncertainties with respect to a native land claim settlement;
- jurisdictional division of responsibilities for land between the federal and territorial governments (e.g. the federal government has responsibility for land disposition and use in the area generally outside of organized communities; whereas the territory has responsibility over the means of controlling or directing the use of land - planning, zoning and taxation);

²⁵ Personal Communication, Regional Manager, Land Resources, DIAND, Whitehorse, May 15, 1978.

FIGURE 4

Land Use Permit Flow Chart



Source: DIAND, Procedures, Licensing, Legislation and All That, p. 9.

- general lack of background natural resource information on which to base decisions regarding administration and management of the land resource. Land management is presently being carried out on the basis of administration and regulation with a limited information base;
- the lack of land use planning or planning programs;
- lack of base maps at the appropriate scale on which to record land dispositions;
- lack of an appropriate legal land location system that is easily understood by the public, e.g. the familiar township grid in southern Canada.

In an attempt to deal with some of these issues, funding is being provided by both territorial and federal governments for studies aimed at ensuring that more adequate baseline information will be available. The Federal-Territorial Lands Advisory Committee has been established to provide federal-territorial liaison and to assist in improving land administration and management decisions. The Land Use Advisory Committee has been established to provide advice on the control of land use operations.

IV. COMMUNITIES, LAND USE PLANNING AND REGIONAL DEVELOPMENT

Topics discussed in this chapter are population growth rates, population distribution, community development in Yukon, characteristics of Yukon communities, land and land use planning in and around communities, housing, and economic development programs.

POPULATION GROWTH RATES

The 1976 population of the territory was 21,836, an increase of 3,448 people or 18.8% over 1971. During the same period Canada's population increased 6.6%. Yukon contains less than 1% of the Canadian population.

From Table 6, the 1951-61, 1961-71 and 1971-76 changes in population were 60.8%, 25.7% and 18.8% respectively. Reasons for the change in population were explained in Chapter II in the discussion on population fluctuations.

Projecting population growth rates for Yukon is difficult because of the history of population fluctuations, as well as the small population base and the effect that any major development could have on this population base (e.g. proposed Alaska Highway natural gas pipeline, opening or closing of any mines). If all developments currently planned do proceed, the population could double in 10 years.¹

POPULATION DISTRIBUTION

As with Canada as a whole, the Yukon population is urbanized and concentrated in the southern portion of the territory. For example, in 1976

¹ Department of Public Works, Pacific Region, Program Planning and Coordination, Yukon Forward Plan (November 1977), p. 16.

TABLE 6
POPULATION DISTRIBUTION IN YUKON 1951-1976

	RURAL				
	Total Yukon	Total Urban	Total Rural	Rural Non-Farm	Rural Farm
1951	9,096	2,594	6,502	N.A.	N.A.
1956	12,190	2,570	9,620	9,580	40
1961	14,628	5,031	9,597	9,550	47
1966	14,382	6,828	7,554	7,492	62
1971	18,388 ^a	11,220	7,170	7,115	55
1976	21,836 ^a	13,315	8,525	8,525	5 ^b

N.A. - Not Available.

^a Because a technique known as random rounding was used (whereby the last digit was rounded off to 0 or 5) for distributions such as this for 1971 and 1976 censuses, the sum of the individual categories in the row does not equal the total population of Yukon.

^b The 1976 definition of a census farm differs from that used in previous censuses. This should be kept in mind when comparing historical data.

Source:

Census of Canada

about 80% of the territory's population lived in seven organized communities and approximately 61% of the total population lived in one city, Whitehorse.

The density of population in Yukon, based on a land area of 531 844 km² (205,346 mi.²) and a 1976 population of 21,836, is 0.04 persons per km² (0.1 persons per mi.²).

Whitehorse is by far the largest urban centre in Yukon with a 1976 population of 13,311. The next largest centre, Faro, had a 1976 population of 1,544.

Trends regarding population distribution are:

- (a) tremendous fluctuations in Yukon population over the past 80 years;
- (b) a steady increase in population during the decade 1966-76;
- (c) the population is concentrated in the southern portion of the Territory, along the Alaska Highway (about three-quarters of the total population);
- (d) over 80% of the Yukon population is concentrated in seven organized communities and one community, Whitehorse, contains about 61% of the entire Yukon population.

COMMUNITY DEVELOPMENT IN YUKON²

The small populations and the lack of local industry have resulted in a very weak tax base for areas outside larger centres and traditional forms of community government have evolved slowly. Because of this, the territorial government is responsible for many tasks which rest with municipal councils in southern Canada. An example of this is zoning,

² Based on Margot J. Fawcett, ed., The 1977 Corpus Almanac of Canada (1977); and Naysmith, Land Use and Public Policy in Northern Canada, pp. 82-83.

which takes place under the Area Development Ordinance in unorganized and semi-organized areas.³

In Yukon, the progression toward municipal status is from an unorganized community, to Local Improvement District (LID), to municipality (village, municipal district, town or city), depending on population and minimum assessment base. These are two basic classes of local government in Yukon: Local Improvement Districts (LIDs) and municipalities.

LOCAL IMPROVEMENT DISTRICTS

This form of local government is established pursuant to the Local Improvement District Ordinance. The organization of a LID can be initiated by a petition signed by at least ten prospective voters of a district proposed by petitioners. The affairs of an established District are managed by a five-member Board of Trustees who are elected for a two-year term. The Board of Trustees manages the budget of the LID and acts in an advisory capacity to the Commissioner and Department of Local Government. The concept of a LID may be considered as an introductory period to local government until there is a community ability and desire to achieve complete municipal status. The authority and responsibility of the LID is limited. The Yukon government remains the taxing authority, with the Board of Trustees of the LID responsible for providing community services on an operational grant from the Department of Local Government. Annual operation and maintenance budgets are approved by the Department of Local Government.

The LID is a legal entity and has the power to purchase, acquire and hold land for the purpose of the ordinance (S.5(2)), and power to acquire, operate, maintain, hold, sell, lease or dispose of, real or

³ Beauchamp, Land Management in the Canadian North, p. 46.

personal property within the district for recreational, community or public use (S.16.1(1) as amended). Advice to the Commissioner in terms of zoning regulations that might be applied under the Area Development Ordinance may also be provided by the LID.

The LID is a designated area with clearly delineated boundaries. There are presently four LIDs in Yukon: Watson Lake, Mayo, Haines Junction and Teslin.

MUNICIPALITIES

Municipalities are established pursuant to the Municipal Ordinance. The four different classes of municipalities - village, municipal district, town and city - enjoy similar authority and responsibility. The established criteria (under Section 8 of the Municipal Ordinance) for classifying municipalities is as follows:

Village or municipal district.....	over 300 population - or over \$1,000,000 assessment
Town.....	500-2,500 population - or over \$2,000,000 assessment
City.....	over 2,500 population and over \$10,000,000 assessment.

Municipal councils are comprised of an elected mayor and four elected aldermen, except in the case of a city with a population over 5,000 which has a mayor and six elected aldermen.

Under the Municipal Ordinance the Commissioner may propose to establish a municipality in an area meeting the population and assessment criteria indicated above. The residents of the area have the right to appeal such a proposal (S.6).

There are presently three municipalities in Yukon: one town (Faro) and two cities (Whitehorse and Dawson). Although Dawson does not meet the

current population and assessment criteria to be established as a city, it was incorporated during the gold rush when its population exceeded 30,000.

Municipalities have power to levy a general property tax and school tax. A municipality has independent control over many areas of administration and it can, of its own will, initiate a variety of projects. It receives conditional and unconditional grants from the Yukon government and can, within limits, use these funds as it sees fit. Any by-law passed by the municipal council may be disallowed by the Commissioner within one year after its passage (S.65(2)). Municipalities may pass zoning by-laws (S.100) but they must be approved by the Commissioner (S.100(5)). They may also regulate the subdivision of land (S.103). The municipality may also acquire, sell, hold, lease or otherwise dispose of, any real or personal property for municipal purposes (S.129(1)(a)) and acquire land within the municipality for resale or lease for residential, industrial, commercial or other purposes, and may subdivide and develop the land prior to disposing of it (S.129.1(1)). The municipality may also acquire and hold any real or personal property within the municipality for pleasure, recreation or community uses of the public (S.129.2(1)).

UNINCORPORATED COMMUNITIES

All communities not included in either the LID or municipal category are classified as unincorporated (e.g. Carcross). At this level, no true form of local government exists. Basic services are available through the Department of Local Government which administers zoning regulations, land use and municipal services planning, and community development. Local community associations are consulted on most matters.

MINING TOWN

One private mining town, Elsa, exists which does not function under any form of local government structure.⁴ It is basically a self

⁴ A second mining town, Clinton Creek, closed September 1978 and structures within the townsite have been auctioned off for removal within one year.

sufficient, privately owned townsite that provides its own services except for education, police protection, social welfare and library services which are provided by the Yukon government.

NATIVE INDIAN VILLAGES

These communities are eligible to be organized as any of the local government entities. However, most have preferred to remain under the authority of the federal government, DIAND, Indian and Inuit Affairs. In many of the communities, the Indian people live in a settlement which comprises part of a larger community of both Indian and non-Indian residents. Therefore, the part of the community which may be referred to as the Indian Village may not be able to act independently to this end.

The Department of Local Government provides some basic municipal services to native Indian settlements such as Old Crow, while in other cases, such as Teslin, the LID provides some of the services.

CHARACTERISTICS OF YUKON COMMUNITIES⁵

About three-quarters of the Yukon population lives along the Alaska Highway. The only community in Yukon not accessible by road is Old Crow. Table 7 lists the 21 main settlements in Yukon, their administrative status, and 1971 and 1976 populations. As can be seen from this table, there is a tremendous variation in the size of Yukon communities.

Some communities, such as Burwash Landing, Old Crow, Pelly Crossing and Upper Liard are predominantly Indian communities. Other communities such as Beaver Creek, Elsa, Faro, Keno Hill and Whitehorse are primarily white communities. In Carcross, Dawson, Destruction Bay, Haines Junction,

⁵ Based largely on Lysyk, Bohmer, and Phelps, Alaska Highway Pipeline Inquiry, pp. 83-84.

TABLE 7
YUKON SETTLEMENTS

Settlement	Administrative Status	1971 ^a Population	1976 ^b Population
Beaver Creek	UC	120	170
Burwash Landing	UC	67	60
Carcross	UC	188	253
Carmacks	UC	381	420
Clinton Creek ^c	CT	450	564
Dawson	City	762	838
Destruction Bay	UC	82	80
Elsa	CT	298	350
Faro	Town	863	1,544
Haines Junction	LID	183	268
Keno Hill	UC	79	70
Mayo	LID	381	448
Old Crow	None	206	224
Pelly Crossing	UC	141	100
Ross River	UC	317	350
Stewart Crossing	None	43	11
Swift River	None	33	33
Teslin	LID	264	241
Upper Liard	UC	219	100
Watson Lake	LID	553	808
Whitehorse	City	11,217	13,311
Total 21 Settlements		16,847	20,243
Total Yukon		18,388	21,836

UC (Unincorporated Community)
LID (Local Improvement District)
CT (Company Town)

- ^a The 1971 population figures are taken from the Government of the Yukon Territory, Community Information Booklet (1977), except for Dawson, Faro, Haines Junction, Mayo, Teslin, Watson Lake and Whitehorse which are taken from the Census of Canada.
- ^b The 1976 population figures are taken from the Government of the Yukon Territory, Community Information Booklet (1978).
- ^c The mining town of Clinton Creek closed in September 1978.

Mayo, Teslin and Watson Lake, whites are in the majority. Carmacks and Ross River have relatively balanced white and Indian populations.

The ages of the communities also vary. Faro, a company town built to accommodate workers at the Cyprus Anvil Mine is only ten years old. Destruction Bay, Watson Lake and Haines Junction are also relatively young, as they were started during World War II or shortly after. On the other hand, settlements at communities such as Burwash Landing and Old Crow have existed for many thousands of years. It is believed that the Kluane Lake area, where Burwash is located, has been occupied intermittently for 8,500 years. The Old Crow area is believed to be the location of one of North America's oldest settlements, dating back more than 30,000 years.

Some of the communities are composed almost entirely of persons engaged in full-time wage employment who have come to Yukon since the building of the Alaska Highway. Others have come to Yukon from the south to escape full-time involvement in the wage economy in order to participate in a more varied way of life or, perhaps because of greater opportunity, to establish a business. With regard to communities that are comprised almost entirely of Indians, there may be a mixture of those engaged in wage employment and those engaged in traditional ways of life such as trapping, or a combination of wage employment and trapping.

Whitehorse, serving as the capital of the territory, houses a large number of both federal and territorial government employees as well as those engaged in service industries for the territory as a whole.

LAND AND LAND USE PLANNING IN AND AROUND COMMUNITIES

BLOCK LAND TRANSFERS

In 1970 the federal government introduced a policy of transferring federal lands in and around communities in Yukon and Northwest Territories to the administration and control of the territorial governments.

The purpose of this was to allow the territorial governments more autonomy and responsibility with regard to community development.

Under this Block Land Transfer policy, federal lands around nine communities in Yukon have been transferred to the territorial government since the program began. The location of these Block Land Transfers and of the areas involved are listed in Table 8. It should be noted that these Orders-in-Council transfers do not include: mineral rights nor the right to work the land; nor all land and buildings shown as reserved in DINAD's records in Ottawa for any department of the Government of Canada or Northern Canada Power Commission; nor the beds of all bodies of water and water-associated rights. It is estimated that in some cases as much as one-third of the land in a Block Land Transfer may be federal land.⁶

Since 1975, Block Land Transfers, that would otherwise have been made, have been held in abeyance because of Indian opposition to transfers taking place in advance of land selection under land claims agreements.

On March 3, 1978, the Minister of DIAND announced a new interim federal land transfer policy.⁷ This policy is outlined here.

1. The previous policy of transferring land from federal to territorial administration in large blocks within and surrounding northern communities, the Block Land Transfer (BLT) Program, was suspended.
2. The BLT Program is to be replaced by a Federal Land Transfer Policy. Under this policy transfers from federal to territorial administration are restricted to built-up areas and to vacant lands required to meet immediate community expansion and development needs only.

⁶ Personal communication, Supervisor of Lands, DIAND, Whitehorse, May 18, 1978.

⁷ Minister of Indian Affairs and Northern Development, "Revised Northern Land Transfer Policy Announced", (March 3, 1978), Appendix B.

TABLE 8

BLOCK LAND TRANSFERS

LOCATION	AREA	
	<u>Km²</u>	<u>Mi.²</u>
Whitehorse	621.6	240
Faro	235.7	91
Beaver Creek	5.2	2
Carmacks	31.1	12
Mayo	10.4	4
Teslin	2.6	1
Destruction Bay	5.2	2
Carcross	24.9	9.6
Watson Lake	5.2	2
<hr/>		
TOTAL NINE AREAS	941.9	363.6
<hr/>		

Source:
Federal Orders-in-Council.

The new policy will remain in effect pending further developments in land claim settlements and constitutional evolution.

3. This Federal Land Transfer Policy will be administered in each territory according to the following:

- (a) requests for land transfers are to be initiated by the Territorial governments and made to the Regional Director, Northern Operations;
- (b) requests for land transfers in built-up areas are to be supported by site plans and legal descriptions;
- (c) requests for transfers of vacant lands are to be supported by a statement of requirement, community growth projections and preliminary development plans for the parcels needed;
- (d) initial review of the requests for transfer are to be made by the Regional Director and forwarded to the Assistant Deputy Minister, Northern Affairs Program, recommending the boundaries of the parcels with substantiation in each case;
- (e) each transfer proposal is to be subject to the approval of the Claims Policy Committee; and
- (f) parcels approved for transfer are to be actioned by Order-in-Council as required.

Haines Junction was the site of the first application under this revised policy. A 5.26 ha (13 a.) parcel of land was transferred from federal control to the Yukon government for development of a mobile home subdivision. Within the subdivision eight lots are reserved from the transfer and held for use by the local Indian band. The Minister of DIAND also announced that the band could receive, if it wished, at least five commercial lots along the Alaska Highway or elsewhere in the community.

Since the announcement of the new federal land transfer policy, DIAND has received a total of six requests for land transfers: Dawson City industrial subdivision, Bear Creek subdivision (Dawson area), highway complex at km 382 (mi. 231) Dempster Highway, Haines Junction industrial

area, Haines Junction trailer park and Haines Junction sewage lagoon.⁸ As mentioned previously a 5.26 ha (13 a.) parcel of land for the Haines Junction trailer park has been transferred by Order-in-Council to the territory. In addition, a 33.19 ha (82 a.) parcel of land for development as an industrial subdivision at Haines Junction has also been transferred to the Yukon government. The Yukon Territory Water Board turned down the proposed Haines Junction sewage lagoon; consequently the application for the land transfer is no longer in effect. The remainder of the requests are still being reviewed by DIAND officials.

The Department of Local Government has made a number of suggestions regarding Block Land Transfers to ensure adequate zoning and land use around communities.⁹ The recommendations made, if accepted, would approximately double the size of areas under the Commissioner's control. It was also recommended in that paper that existing facilities, such as campgrounds, should also be part of a Block Land Transfer program.¹⁰

COMMUNITY PLANNING

There are presently no official government planning bodies at either the territorial or local government levels. Through the Department of Local Government, the territorial government provides a number of services to local communities, including community planning. Section 59 of the Community Assistance Ordinance empowers the Commissioner to prepare the first community plan for an area, including the cost of preparing initial zoning plans, land use maps and zoning by-laws (S.59(1)). Section 59(2) of the ordinance allows for a review of the community plan and zoning by-laws once every five years.

⁸ Personal communication, Regional Manager Land Resources, DIAND, Whitehorse.

⁹ Government of the Yukon Territory, Department of Local Government. "Land, Its Development and Disbursement: A Discussion Paper."

¹⁰ Ibid., p. 7.

Community development plans have been prepared for Whitehorse, Faro, Dawson, Mayo, Carmacks, Carcross, Teslin, Watson Lake and Haines Junction. In addition, community development plans were expected to be completed for Beaver Creek and Destruction Bay during 1978. All of these plans are prepared by outside consultants on a contract basis. With respect to Whitehorse, the city is responsible for planning use of unalienated lands within the city boundary, although these lands are owned by the territory. The city employs consultants on an as needed basis to prepare subdivision and industrial area plans.¹¹

The Department of Local Government acts as developer for all Yukon communities. "These communities determine the level of services desired such as sewer, water, paving, etc. It is also up to the community to approve planning and zoning and designate greenbelts, walkways, open spaces, etc., within subdivisions."¹² All zoning by-laws must be approved by the Commissioner.¹³

Area Development Ordinance

This ordinance is a form of land use control legislation. It applies to all land, not only Commissioner's lands. Section 3 of the ordinance states that: "The Commissioner may designate as a development area any area in the Territory where he considers that it will be necessary in the public interest to regulate the orderly development of such area as contemplated by this Ordinance."

11 Alaska Highway Pipeline Panel, Initial Environmental Evaluation of the Proposed Alaska Highway Natural Gas Pipeline Yukon Territory (May 1977), p. 684.

12 Government of the Yukon Territory, Department of Local Government, "Land, Its Development and Disbursement: A Discussion Paper," p. 26.

13 Personal communication, Director, Department of Local Government, YTG, May 17, 1978.

Section 4(1) of the Ordinance authorizes the Commissioner to make regulations for the orderly development of an area respecting:

- (a) the zoning of the area, including the allocation of land in the area for agricultural, residential, business, industrial, educational, public or other purposes;
- (b) the regulation or prohibition of the erection, maintenance, alteration, repair or removal of buildings;
- (c) streets, roads, lanes, sidewalks, parks, street lighting and street transit;
- (d) public health including the supply, treatment and purification of water, the collection and disposal of garbage and other sewage, hospitals, and the burial of destitute persons;
- (e) fire protection;
- (f) animals;
- (g) the regulation or the prohibition of the discharge of guns or other firearms within a development area.

"The thrust of these powers is clearly to give the territorial government a voice in development of new settlement areas by permitting control over the above matters long before the area is sufficiently developed to take on these responsibilities itself, as a municipality."¹⁴

Development areas have been established under the Area Development Ordinance at Carcross, Carmacks, Haines Junction, Mayo, Ross River, Teslin, Vangorda Creek (Faro) and Watson Lake. In addition, an area around the city of Whitehorse outside the municipal boundaries, known as the Whitehorse Metropolitan Area, is designated as a development area.

The zoning restrictions in these areas vary according to the size of area and the type of activity that is intended to be controlled. "For example, in the Whitehorse Metropolitan Area with many subdivisions, the area development regulations are very comprehensive and similar to the

¹⁴ Beauchamp, Land Management in the Canadian North, p. 44.

zoning by-laws of a large municipality, whereas in the smaller areas only a few provisions regarding the siting of buildings, type of construction, drainage, and road locations have been prescribed.¹⁵ As mentioned previously, authority for enacting zoning by-laws in municipalities (Whitehorse, Dawson and Faro) is provided for in Section 100 of the Municipal Ordinance. These by-laws must, however, be approved by the Commissioner (S.100(5)).

In summary, the Area Development Ordinance allows the establishment of a development area which is a form of zoning control exercised by the territorial government. It may be applied to unorganized settlements, Local Improvement Districts, and any area outside the zoning powers of a municipality.¹⁶ The Area Development Ordinance is more comprehensive than federal land use regulations in that it can control and specify the type and nature of activities in a particular area; whereas the federal Land Use Regulations attempt to minimize alteration of the land surface by controlling the manner in which land use operations are carried out.¹⁷

REGIONAL PLANNING

A regional planning program has only recently started in Yukon. This program has been initiated by the YTG Department of Local Government and the Land Resources group of DIAND.

The proposed program would extend over at least five years and result in regional plans and land use control for several regions. The aerial extent of planning regions and the jurisdiction of zoning controls have not yet been decided. The program is to be jointly implemented by the territorial and federal governments.

15 Ibid.

16 Ibid., p. 46.

17 Naysmith, Land Use and Public Policy in Northern Canada, p. 78.

The priorities for preparation of regional plans will be based upon development pressures and the need for some form of land use controls. The following outlines the areas that the proposed program will cover and the timetable.

- (a) Whitehorse north (Takhini and Ibex River areas north and west of the Whitehorse city proper). A draft report for this area was prepared in April 1978.¹⁸ It outlines objectives and principles upon which specific regulations can be developed, and outlines a proposed land management plan. The report has been circulated for public comment after which a final draft will be prepared for the Executive Committee, Yukon government, for approval and implementation under the Area Development Ordinance.
- (b) Whitehorse - Carcross - Jakes Corner triangle. During 1978 and 1979 a project similar to that done for the Whitehorse north area will be carried out in this area south and east of Whitehorse. Because of its location relative to Whitehorse, and the opening of the Carcross-Skagway road, significant pressure is expected to be exerted on this area for development of the land for residential and associated uses. A proposed land management plan is expected to be developed and available for public discussion in 1979.¹⁹
- (c) Haines Junction area. This area is expected to be examined in 1979-80. Existing development pressures augmented by those related

18 Government of the Yukon Territory and the Department of Indian Affairs and Northern Development, Whitehorse North Land Management Planning Project, Draft copy only (April 1978).

19 Commissioner's Order 1978/110 (dated May 26, 1978) was issued under the Area Development Ordinance. This Order relates to the Whitehorse periphery area (Mayo and Carcross roads, Takhini and Ibex River areas north of Whitehorse, Annie Lake district and area south of Whitehorse). It permits the subdivision of land for large acreages. These interim regulations permit single family residential acreages with a minimum size of 8 ha (20 a.) designed to maintain a low rural population density. The subdivisions will be subject to the approval of the Department of Local Government. All existing legal land uses in the area will be permitted to continue.

to development of Kluane National Park, reconstruction and paving of the Haines Road-Alaska Highway and a possible Alaska Highway natural gas pipeline are all expected to place increased development pressure on this area.

- (d) Dawson and vicinity. This region is expected to be examined in 1980-81. With the opening of the Dempster Highway and the closing of the asbestos mine at Clinton Creek, development pressure is expected to be exerted on Dawson.
- (e) Watson Lake and vicinity,
- (f) Carmacks - Faro corridor and
- (g) Dempster Highway corridor.

Prior to the initiation of this regional planning program, the only previous attempt to develop a concept or regional land use plan was a study of the Kluane region in southwest Yukon carried out in 1973-74.²⁰ That study was jointly sponsored by the federal, territorial and British Columbia governments.

One of the difficulties faced by those involved in carrying out regional planning programs in Yukon is the lack of basic resource inventory and land use data. Although there have been numerous studies carried out in Yukon, there has been no structured or phased resource inventory program to systematically gather the information required for preparation of regional plans. A notable exception to the above has been the

²⁰ Synergy West Ltd., Kluane Region Study, prepared for the Government of the Yukon Territory (June 6, 1974).

Northern Land Use Information Map Series.²¹ In the spring of 1979 a Yukon Land and Resource Inventory atlas is expected to be available. This three-volume atlas will contain about 450 map sheets and a bibliographic index of over 3,000 entries containing information on physical resources, demographic resources, non-renewable resources and renewable resources of the Territory. As with the Northern Land Use Information Map Series, the scale of the maps is 1:250,000.

HOUSING²²

YUKON HOUSING CORPORATION (YHC)

The Yukon Housing Corporation (YHC) was established under the Housing Corporation Ordinance to carry out and assist in providing, developing, maintaining and managing housing in Yukon. The following programs come under the auspices of the Corporation.

Rental/Purchase Housing

As of March 31, 1977, a total of 145 single detached houses had been constructed in various Yukon communities under this program. The Yukon Housing Corporation and Central Mortgage and Housing Corporation (CMHC) shared in the costs of operating the program. Rents are scaled to income, and purchase is possible subject to qualifications.

21 These maps are produced by the Lands Directorate, Environment Canada for the Arctic Land Use Research Program, DIAND. The maps, at a scale of 1:250,000, are intended to provide a convenient information base to assist in regional land use planning and the management of northern development and environmental protection. They integrate a wide variety of data on renewable resources and related human activity in the north. There are a total of 43 maps covering Yukon. The Northern Yukon (north of 66°) was published in 1972 and updated and republished in 1976. Maps covering south and west Yukon were published in 1973 and maps in eastern Yukon (Mackenzie and Selwyn Mountains) were published in 1974. The scale of the maps (1:250,000), however, limits their use for detailed regional land use planning.

22 Government of the Yukon Territory, Yukon Housing Corporation, 1976-77 Annual Report (1977). DIAND also has a housing program for registered Indians operated by the Indian bands.

Low Rental Housing

This program involves housing for single persons and single parent families. Rents are adjusted to the individual's income. Operating costs are shared by YHC and CMHC. The projects constructed to date (two apartment complexes) are both located in Whitehorse, and operated and managed by the Whitehorse Housing Authority.

Low Rental Family Housing

This is a program involving municipal, territorial and federal governments. It provides for construction of standard rental housing for families who cannot acquire adequate housing because of economic reasons. Rental is on a rent-to-income basis. The actual operation of the project is the responsibility of a local housing authority or association. Low Rental Family Housing has been constructed in Whitehorse, Dawson, Watson Lake and Mayo. CMHC and YHC share capital and operating costs. In the city of Whitehorse, the municipality also contributes toward the annual operating deficit.

Rent Supplement

This program provides leasing of housing units to rent to families of low income. Rents are based on a rent-to-income basis. YHC and CMHC share in operating profits or losses.

Senior Citizens Housing

This program provides rental accommodation for elderly residents of Yukon. Rents are adjusted to the tenants' income. Costs are shared between CMHC and YHC. This program has operated only in Whitehorse to date.

Staff Housing

The YHC has responsibility for providing housing for territorial government staff. As of March 31, 1977, the corporation owned 149 units in various communities and leased 52 units in Whitehorse. Rents are based on a market rate established through a comparative appraisal study of the local market to the Whitehorse market.

Government Employee Housing Plan

This program involves the purchase of housing units from territorial employees on termination of employment, when the unit fails to sell on the market. As of March 31, 1977, there were 261 units registered under the plan.

Housing Education

This program involves providing advice on various aspects of home management as well as general tenant relations within YHC projects and the community.

Special Projects

Under the Assisted Home Ownership Program, YHC constructed 28 semi-detached units during 1976-77. A number of private builders have undertaken similar projects and the YHC does not plan to repeat the project.

DEMAND FOR HOUSING AND DEVELOPED LAND

Largely as the result of impacts of a possible natural gas pipeline on the territory, the Yukon Housing Corporation has projected that between 1977 and 1985, 753 temporary or rental housing units and 2,099 permanent housing units will be required in Whitehorse. In communities outside of Whitehorse within the pipeline corridor, projection of permanent housing

requirements in the same period are: Beaver Creek 30, Haines Junction 85, Teslin 30 and Watson Lake 180.²³ The Department of Local Government sees its challenge to be the assurance of a stable and orderly growth in land development.²⁴ It is estimated that it takes a minimum of 18 months to develop land ready for construction.

The disposition of land by the territorial government for various uses was discussed in the previous chapter. It was indicated that land for single family residential, mobile home and acreage lots is sold for the cost of development, (commercial, industrial and multiple dwelling lots are sold on an appraised value basis). To date, the costs of provided off-site services (e.g. major sewer and water trunks, road improvements, water reservoirs) have not been added to the overall subdivision costs.

The Department of Local Government has been examining and implementing alternative concepts of residential land development. For example, in 1977 for the first time, it implemented the concept of acreage residential subdivisions in five communities.²⁵

ECONOMIC DEVELOPMENT PROGRAMS²⁶

The federal and territorial governments recently signed an agreement to make available two programs offered through the federal Department of Regional Economic Expansion. These programs are available under the Regional Development Incentive Act and the Special ARDA program.

23 Government of the Yukon Territory, Department of Local Government, "Land, Its Development and Disbursement: A Discussion Paper", p. 1.

24 Ibid., p. 2.

25 Ibid., p. 8.

26 "Two DREE Programs Now Available in Yukon," Yukon Government News Release (June 5, 1978).

The Regional Development Incentive Act is designed to create employment by promoting industrial development. Development and incentive grants, and loan guarantees may be offered to enterprises to establish, modernize or expand eligible manufacturing and processing operations in Yukon. Grants up to 25% of the approved capital costs, plus \$5,000 for each new direct job created, are available for eligible projects.

The Canada-Yukon Special ARDA program will be jointly funded by the federal Department of Regional Economic Expansion and the Yukon government. The objective of the program is to assist in the economic development and social adjustment of Yukon residents, particularly those of Indian ancestry. Emphasis will be on responding to community initiatives by encouraging new ventures involving the development of local resources and services.

The Special ARDA program has three major components. Firstly, incentive grants will be provided to applicants who wish to establish, acquire, expand or modernize any type of commercial enterprise including manufacturing, processing and service enterprises. Secondly, primary producers such as groups of trappers and fishermen may be provided with grants to purchase essential equipment for improvements to facilities used in basic harvesting activities. Thirdly, special counselling, training and relocating assistance will be available.

In addition to the above programs, agreement-in-principle has been reached between the federal and territorial governments on a subsidiary agreement under the General Development Agreement. The General Development Agreement was signed jointly by the federal and territorial governments August 17, 1977 and provides the mechanisms for joint federal-territorial planning and economic expansion in Yukon.²⁷ The three year subsidiary agreement includes three programs: (1) a collection and retrieval system for resource data, (2) the expansion and improvement of tourist and recreation facilities, and (3) job creation for unemployed or underemployed Yukon residents.²⁸

27 Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 6.

28 "Yukon Programs Get Funds", Yukon News, November 22, 1978.

LAND USE ISSUES

Land use issues associated with communities, land use planning and regional development are:

- no overall land use plan for Yukon;
- no regional plans in place in Yukon;
- the lack of land use planning or planning programs and baseline information (e.g. maps at a suitable scale, information on the biological and physical attributes of the land base, land use information) on which to base decisions regarding administration and management of the land resource base;
- the absence of a structured or phased resource inventory program to assemble the information required.

In an attempt to deal with some of these issues, DIAND is funding studies to acquire additional background natural resource information and has embarked on a cooperative regional planning program with the territorial government which will cover selected areas of the territory over the next five years. Additional information which will assist in planning the use of renewable resources and in the development of overall land management policies for the territory should become available through the programs proposed in the subsidiary agreement under the federal-territorial General Development Agreement.

V. ENVIRONMENT

The purpose of this chapter is to provide an overview of environmental issues and programs in Yukon. Environmental protection programs in Yukon are based primarily on federal legislation administered by the departments of Indian Affairs and Northern Development (DIAND) and Environment (DOE). In addition, the federal Department of Health and Welfare (H&W) administers the territorial Public Health Ordinance.

Environmentally oriented policies, programs, and legislation administered by the federal government and territorial government related to land use sectors are discussed in more detail in other chapters.

The most important pieces of federal legislation dealing with environmental protection as it relates to land and land use in Yukon are as follows:

Administered by DIAND - Territorial Land Use Regulations

- Northern Inland Waters Act
- Arctic Waters Pollution Prevention Act

Administered by DOE

- Fisheries Act
- Migratory Birds Convention Act
- Clean Air Act
- Environmental Contaminants Act

There is other federal legislation which relates to environmental protection, but in a less direct manner. This legislation will be discussed in subsequent chapters. In Yukon, at the territorial level, there is no environmental protection ordinance in existence, although some work has been done on preparation of a draft ordinance. The Public Health Ordinance contains provisions related to prevention of water and air pollution.

ENVIRONMENTAL PROTECTION LEGISLATION

ADMINISTERED BY DIAND

Territorial Land Use Regulations

These regulations came into force in 1971 and were revised in 1977. The regulations provide for issuance of a permit authorizing companies or individuals to carry out certain land use operations, at specific locations, during a definite time period, subject to conditions which are designed to provide protection for the environment as well as protection of the interests of residents of the area where the activity is proposed to take place. A detailed discussion of these regulations was provided in Chapter III and a copy of the actual regulations is included as Appendix I.

Northern Inland Waters Act and Regulations

This Act was passed in 1970 and proclaimed in force in 1972. The legislation provides for the conservation, development and use of the water resources of the territories. It also provides for the establishment of water boards to licence water usage and waste disposal. A detailed discussion of this legislation and its operation is outlined in Chapter XII.

Arctic Waters Pollution Prevention Act and Regulations

This Act was passed in 1970 and proclaimed in force August 1972. The Act was designed primarily to protect the Arctic waters on the north coast of the territories against pollution. It governs the development and shipping activities in Arctic waters and islands adjacent to the mainland, and islands of the Canadian Arctic, to protect the ecological balance of water, ice and land areas. Stringent penalties are provided for in the Act. Absolute civil liability is imposed on persons,

including ship owners and cargo owners, for damage resulting from the unlawful deposit of waste in Arctic waters.¹

Section 4(1) of the Act prohibits the deposit of waste on any land on the mainland or Arctic islands where there is the possibility of it entering the salt water (the Northern Inland Waters Act governs the deposit of waste in fresh water). However, regulations under the Act (SOR/72-253 as amended) authorize the deposit of domestic waste under conditions authorized by the relevant public health ordinance, and the deposit of industrial waste, of a type and in a quantity, as authorized under the Oil and Gas Production and Conservation Act, the Territorial Lands Act or the Public Lands Grants Act.² The Act also establishes monetary limits of liability for deposit of waste by various operator classes.³

The Act is administered by the Arctic Waters Advisory Committee. This committee is comprised of federal and territorial officials and has responsibility for recommending environmental conditions which are included with any approval for offshore drilling.

ADMINISTERED BY DOE

Fisheries Act - Bill C-38

This amendment to the Fisheries Act came into force September 1, 1977. It clarified and strengthened the environmental protection provisions of the Act. Section 31 introduces a new offence regarding destruction of

¹ A.R. Lucas and E.B. Peterson, "Northern Land Use Law and Policy Development: 1972-78 and the Future," in Northern Transitions: Second National Workshop on People, Resources and the Environment North of 60°, vol. II, ed. by Robert F. Keith and Janet B. Wright (1978), p. 67.

² Ibid., pp. 67-68.

³ Ibid., p. 68.

fish habitat. Section 33(5) increases the maximum penalty for violation of the main prohibition against deposit of deleterious substances in waters frequented by fish to \$50,000 from \$5,000 for the first offence, and \$100,000 for subsequent offences. In addition, each day of prohibited action is considered a separate offence. Section 33(7) allows the court to issue orders requiring positive action to prevent further deposit of deleterious substances.⁴

Absolute civil liability of owners, carriers and individuals for the cost of cleanup of spills or deposits of deleterious substances is established in Section 33(10)-(10.5). In addition, fishermen are given a right of action for loss of income due to deposit of deleterious substances, other than by ships (S.33(10.1)).⁵

Section 33.1 also extends the Minister's power to require provision of plans and specifications of alterations or extensions to works likely to result in the deposit of deleterious substances.

The information requirement now applies to any operation, including existing operations. Required information includes details about the works themselves and also about the water and fish habitat likely to be affected by the works. Provision is made for certain information to be prescribed by regulation, to be submitted to the Minister without prior request. Persons causing spills or owners of spilled substances are required to immediately report the spill to designated inspectors (S.33.2(4)). Failure to report is made an offence (S.33.4). These amendments give S.33.1 even more of the characteristics of a limited statutory environmental assessment requirement.⁶

The Fisheries and Marine Service of DOE has jurisdiction over matters relating only to fish (e.g. supervision of river and stream crossings

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

which may cause sediments harmful to fish).⁷ The Environmental Protection Service of DOE has general pollution prevention jurisdiction under the Act.

Migratory Birds Convention Act

Section 35 of this Act prohibits the deposition of wastes in waters or areas frequented by migratory birds. The Canadian Wildlife Service of DOE has responsibility for administration of this Act.

Clean Air Act⁸

This Act was passed in 1970. It is the principal legislation to control air quality. Regulations have been established setting out guidelines for automobile exhaust emission levels as well as noise levels. The Environmental Protection Service of DOE has responsibility for administration of this Act.

Environmental Contaminants Act⁹

This Act requires industry to provide information about designated contaminant substances and empowers the federal government to ban the

7 Pursuant to the Yukon Territory Fishery Regulations under the federal Fisheries Act, there is a "Yukon Territory Gravel Removal Order". This order prohibits removal of gravel from, or displacement of gravel within, any place on the normal high water wetted perimeter of any portion of any stream, river or other body of water in the territory that is a spawning ground or waters frequented by fish, except under authority of a written permit from an authorized officer of the Fisheries Service. (Yukon Territory Gravel Removal Order, SOR/77-134 Canada Gazette, Part III, Vol. III, No. 4, February 23, 1977).

8 Environment Source Book, A Guide to Environmental Information in Canada, A joint project of the Department of the Environment, Ottawa, and provincial and territorial environment and renewable resource departments (1978), p. 5.

9 Ibid.

use, manufacture, and importation of hazardous substances. Under the Act, cosmetic use of fluorocarbons has been banned and guidelines and standards have been issued for air emissions and effluents for several major industries. The Environmental Protection Service of DOE has responsibility for administration of this Act.

ADMINISTERED BY NATIONAL HEALTH AND WELFARE(H&W)

Public Health Ordinance

Under Section 3 of this Act, the Commissioner may make regulations regarding "(q) the prevention of the pollution, defilement, discoloration or fouling of lakes, streams, rivers, ponds, pools, springs and water courses, so as to ensure their sanitary condition; (r) the prevention, control and abatement of air pollution due to any cause;". Under agreement between the governments of Canada and Yukon, the Medical Services Branch, Health and Welfare Canada, carries out the duties of a territorial public health department, which includes enforcement of the Public Health Ordinance. Discussions are currently under way to transfer health services from the federal to the territorial government.

OTHER LEGISLATION RELATED TO ENVIRONMENTAL PROTECTION¹⁰

The federal government has legislation regarding regulations of spills from shipping (Canada Shipping Act and Regulations, administered by the Ministry of Transport), the construction of possible obstructions to shipping (Navigable Waters Protection Act, administered by the Ministry of Transport). At the territorial level, besides the Public Health Ordinance, the Gasoline Handling Ordinance relates to the control of spills of oil products.

10 William MacLeod, Water Management in the Canadian North: The Administration of Inland Waters North of 60° (1977), pp. 84-85.

ENVIRONMENTAL PROTECTION AND ENVIRONMENTAL QUALITY ISSUES

WATER POLLUTION

Among concerns that have been expressed about the quality of water in certain areas of the territory are: domestic sewage outfalls along watercourses; industrial pollution resulting in deposition of substances such as toxic metals in lakes and rivers; and pollution caused by mining developments such as placer mining operations.

Government agencies addressing this issue are the federal departments of DIAND, DOE, H&W.

With regard to the issuance of licences under the Northern Inland Waters Act, DIAND and DOE work closely together. All new applications for licences on fish bearing streams are referred to the Fisheries and Marine Service of DOE. In addition, the effluent regulations attached to licences are taken directly from the Fisheries Act and Regulations.¹¹

With regard to domestic sewage, Whitehorse has recently completed a sewage lagoon which will provide primary treatment. Dawson currently discharges sewage into the Yukon River but is in the process of building a treatment plant. The rest of the communities either operate on septic tanks or have some form of primary treatment such as a lagoon.

Where land use regulations do not apply (e.g. placer mining), regulations under the Northern Inland Waters Act are often the only control over environmental impacts.

The federal and territorial governments have jointly developed a contingency program for Yukon through the "Environmental Protection

¹¹ Personal communication, Regional Manager Water Resources, DIAND, Whitehorse, May 15, 1978.

Subcommittee of the Yukon Disaster Committee". This subcommittee has plans to work with private companies to develop specific contingency plans, such as for the safe transport and storage of hazardous chemicals and petroleum products. The Director of the Yukon Branch, Environmental Protection Service, DOE, chairs this subcommittee.

ENVIRONMENTAL EMERGENCIES

The Environmental Protection Service of DOE is responsible for alerting appropriate agencies and reporting on environmental emergencies as well as ensuring that cleanup procedures are carried out by the polluter or, where necessary, to initiate cleanup.

During the fiscal year 1977-78 (April 1 - March 31), the Environmental Protection Service reported 31 environmental emergencies. Ten of these incidents were responded to within 24 hours. Twenty-eight of the 31 incidents were initially visited by either DIAND officials or officials of the Environmental Protection Service. Follow-up visits to the sites usually took place.

AIR POLLUTION

Air pollution is not considered to be a major territorial problem but is of concern in larger communities, areas adjacent to industrial works (e.g. gravel crushers) and mining operations.

The federal Clean Air Act is the principal legislation controlling air quality. The Environmental Protection Service of DOE has developed "Arctic Mining Industry Guidelines" under this Act. Asphalt paving industry national guidelines have also been established under the Act. The Environmental Protection Service operates the National Air Pollution Surveillance station at Whitehorse. A carbon monoxide monitoring program has been carried out in Whitehorse over the past four years.

SOLID WASTE MANAGEMENT

Disposal of waste metal (e.g. abandoned vehicles and fuel drums), as well as disposal of hazardous materials (e.g. industrial chemicals and pesticides), has become a concern at all government levels. In Yukon, DIAND, the Environmental Protection Service of DOE, and the territorial government have all been involved in examining the problem and embarking on solutions.

Over the past few years the Land Resources group of DIAND has established waste metal disposal sites at key locations throughout the territory.

The Environmental Protection Service of DOE has been working with the territorial government on the upgrading of existing waste disposal sites. The Wildlife Branch of the Yukon government has been particularly concerned about the attraction of wildlife to unnatural food sources such as garbage dumps.

A federal-territorial solid waste subcommittee of the Land Use Advisory Committee, has been established to examine the problem and suggest some solutions.

RECLAMATION/RESTORATION POLICIES AND PLANS

There are currently no specific reclamation policies or guidelines applicable to conducting reclamation studies and formulating plans for mined areas. However, studies of this problem have been carried out on a site specific basis under DIAND's Arctic Land Use Research Program. In addition, DIAND and the Environmental Protection Service of DOE are currently studying the problem of reclamation at the Clinton Creek mine site.

ENVIRONMENTAL ASSESSMENT PROCEDURES AND GUIDELINES

FEDERAL ENVIRONMENTAL ASSESSMENT AND REVIEW PROCESS (EARP)

The decision to institute a federal Environmental Assessment Review Process for federal projects, programs and activities was made by Cabinet on December 20, 1973 and further amended on February 15, 1977.

By the 1973 Decision, the Minister of the Environment was directed to establish, in cooperation with other ministers, a process to ensure that federal departments and agencies:

- take environmental matters into account throughout the planning and implementation of new projects, programs and activities;
- carry out an environmental assessment for all projects which may have adverse effect on the environment before commitments or irrevocable decisions are made; projects which may have significant effects have to be submitted to the Federal Environmental Assessment Review Office for formal review;
- use the results of these assessments in planning, decision-making and other implementation.

The Process established by the Minister of the Environment, through the Interdepartmental Committee on the Environment, is based essentially on the self-assessment approach. Departments and agencies are responsible for assessing the environmental consequences of their own projects and activities or those for which they assume the role of initiator, and deciding on the environmental significance of the anticipated effects.

As early in the planning phase as possible, the initiating department screens all projects for potential adverse environmental effects. One of the following four decisions is possible from this procedure:

- a) No adverse environmental effects, no action needed;
- b) Environmental effects are known and are not considered significant. Effects identified can be mitigated through environmental design and conformance to legislation/regulations. The initiator is responsible for taking the appropriate action but no further reference to the procedures of the Environmental Assessment and Review Process is required.
- c) The nature and scope of potential adverse environmental effects are not fully known. A more detailed assessment is required to identify environmental consequences and to assess their significance. The initiator therefore prepares or procures an Initial Environmental Evaluation (IEE). A review of the IEE will indicate to the Initiator whether alternative (b) above or (d) below should be followed.

d) The initiator recognizes that significant environmental effects are involved and requests the Executive Chairman, Federal Environmental Assessment Review Office, to establish a Panel to review the project.

If the initiator decides to submit a project for Panel review, that project may not proceed until this review is completed and recommendations are made to the Minister of the Environment.

The Panel established by the Executive Chairman, Federal Environmental Assessment Review Office, issues guidelines for the preparation of an Environmental Impact Statement (EIS), by the initiator or associated proponent, reviews the EIS, obtains the public response to the EIS and acquires additional information deemed necessary. It then advises the Minister of the Environment on the acceptability (or otherwise) of the residual environmental effects identified.

The Minister of the Environment and the Minister of the initiating department decide on the action to be taken on the report submitted by the Panel. These are implemented by the appropriate Ministers and associated proponents.¹²

There are currently four Yukon projects registered with the Panel: Alaska Highway Gas Pipeline project, Dempster Pipeline project, Shakwak project (reconstruction of Haines Road-Alaska Highway, B.C. and Yukon), and Yukon Transportation study.

Alaska Highway Gas Pipeline Project¹³

The proponent of this project is Foothills Pipe Lines (Yukon) Ltd. of Calgary. The proposal is to construct and operate a buried natural gas transmission line to initially transport Alaskan gas to United States markets in the lower 48 states. The proposed Yukon section runs from Beaver Creek in Western Yukon, along the Alaska Highway for about 818 km (508 mi.) to Watson Lake. At its northern end the pipeline is proposed to connect to 1 178 km (732 mi.) of pipeline in Alaska. At its southern

12 Environment Canada, Federal Environmental Assessment and Review Process, Register of Panel Projects and Bulletin, Number 6 (December 1978), pp. 2-3.

13 Ibid. pp. 4-6; A.B. Yates, Northern Pipeline Agency, Address to the Pipeline Contractors' Association of Canada, Vancouver, B.C. (April 27, 1978); and Foothills Pipe Lines (South Yukon) Ltd., Environmental Impact Statement for the Alaska Highway Gas Pipeline Project (January, 1979).

end it would connect to about 2 414 km (1,500 mi.) of proposed line in British Columbia, Alberta and Saskatchewan and then to existing pipelines in the United States.

Possible environmental effects include: degradation of permafrost causing subsidence and possible rupturing of the pipeline, siltation of streams, interruption of migratory fish runs, destruction of spawning and rearing areas, and displacement of wildlife species, such as Dall sheep, from their traditional range.

The normal procedure for environmental impact assessment is for the establishment of an Assessment Panel. This Panel then issues formal guidelines for the preparation of an EIS, conducts technical and public reviews of the statement, and makes recommendations to the Minister of the Environment concerning project implementation. For this project, however, the federal government faced major decisions on competing pipeline proposals in the fall of 1977. The limited time available to the Panel made a full environmental assessment and review of the project impossible. Instead, the Panel was instructed, by the Minister, to review existing data, seek public and professional opinion and prepare an interim report by August 1, 1977. This was done on the understanding that, if the project was a contender after decisions on competing proposals had been made, the normal panel procedure involving a full and complete review of the project would apply. Submission of an interim report by August 1 enabled the government to consider environmental factors associated with this project in its decision-making process.

A preliminary meeting was held by the Panel in May, in Whitehorse, to inform the public of the project and to obtain public feedback on the procedures for the hearings that were to follow. Initial hearings, dealing with identification of environmental concerns, were held June 13-17, 1977 in Whitehorse. Community meetings along the proposed pipeline route were also held in May and June. The second phase of the hearings, which concentrated on obtaining further information from the public and from technical experts assigned to assist the Panel on the

concerns raised in the June meetings, were held in Whitehorse beginning on July 5.

The Panel reported its findings to the Minister in early August, 1977. The report outlined the major environmental issues and the major data deficiencies which had been identified.

As a result of numerous developments and inquiries conducted by Berger,¹⁴ National Energy Board,¹⁵ Lysyk,¹⁶ and the Panel¹⁷ related to various proposals for transportation of natural gas from the Arctic to southern Canada and U.S.A., the Canada-U.S.A. Pipeline Agreement was signed September 20, 1977. On April 13, 1978, Bill C-25, the Northern Pipeline Act, was proclaimed in force to carry out and give effect to this above-mentioned agreement. The agreement assures Canada access to Mackenzie Delta gas reserves by construction of the Dempster lateral pipeline from the Mackenzie Delta to Whitehorse, where it would join the Alaska Highway pipeline. Under the agreement, the U.S.A. will pay between two-thirds and the total cost of moving Canadian gas along the section of any Dempster lateral pipeline between Dawson and Whitehorse. If construction overruns on the main pipeline are within 35% of estimates, the U.S.A. will bear the full costs. However, if overruns are greater than this, the U.S.A. will pay proportionately less until the two-thirds limit is attained.

The Northern Pipeline Act incorporates the Canada-U.S.A. agreement as a schedule. This becomes the certificate of public convenience and necessity which otherwise would have been issued by the National Energy Board.

14 Mr. Justice Thomas R. Berger, Northern Frontier, Northern Homeland, The Report of the Mackenzie Valley Pipeline Inquiry, Volume One, April 15, 1977 and Volume Two, Terms and Conditions, November 30, 1977.

15 National Energy Board, Reasons for Decision Northern Pipelines, Volumes 1, 2 and 3 (1977).

16 Lysyk, Bohmer and Phelps, Alaska Highway Pipeline Inquiry (July 29, 1979).

17 Fisheries and Environment Canada, Alaska Highway Pipeline: Interim Report of the Environmental Assessment Panel to the Honourable Romeo LeBlanc, Minister of Fisheries and the Environment (July 27, 1977).

The Act also creates the Northern Pipeline Agency which will provide the central focus for all federal responsibilities for the surveillance and monitoring of the pipeline. The agency is responsible to a designated Minister of government. A commissioner acts under the authority delegated by the Minister, serves as the deputy head of the Agency in Ottawa, and has prime responsibility for advising the Minister on policy. The operational headquarters of the Agency is in Calgary with branch offices in Whitehorse, Vancouver and Saskatchewan.

The major functional part of the Agency is headed by the Administrator. Agency staff will be recruited from those actively involved in pipeline-related matters in federal departments and agencies, and from the private sector as needed.

The Act provides for the transfer of powers from federal departments to the Agency and authorizes the Agency to contract with departments for provision of services. This provides a single focus for federal powers in relation to the pipeline.

To coordinate federal, provincial and territorial activities in relation to the pipeline, the Act provides for a federal-provincial consultative council. The Act also provides for establishment of advisory councils of up to ten people from outside the government. A council will be established for Yukon. A special parliamentary committee has also been established to review the Agency's activities three times a year.

The Agency will disband one year after leave to open the last section of the pipeline is granted, unless by that time an application for the construction of the Dempster lateral pipeline has been approved.

The first task of the Agency is to develop detailed terms and conditions that will be applied to the project and supplement those contained in the Act.

In Yukon there will be an opportunity for review and comment on proposed terms and conditions through an inquiry initiated by the Agency for the socio-economic terms and conditions, and through the second phase of the Environmental Assessment and Review Process for the environmental terms and conditions.

Yukon has appointed a pipeline coordinator to represent the territory on the federal-provincial consultative council and to work with the Yukon Pipeline Advisory Council and federal pipeline agencies in Whitehorse, Calgary and Ottawa.

Guidelines for preparation of a detailed environmental impact statement for this project were issued in December 1977. The completed EIS was made available for review in January 1979. The Panel will arrange for public and technical review, early in 1979. Following this, the Panel will report its review findings to the Minister of the Environment. This report is likely to be completed in late spring 1979.

The pipeline is proposed for completion in 1983 and would employ a peak work force of 2,300 people (1981). The estimated cost to build the Canadian section of the pipeline is \$4 billion.

A corridor reserve of 4 km (2.5 mi.) on either side of the centreline of the proposed Alaska Highway natural gas pipeline was established October 6, 1977, (P.C. 1977-2859) under the Territorial Lands Act. This Order-in-Council withdrew from disposition lands within this 8 km (5 mi.) reserve, except for instances when the land might be required for disposal of quarry materials under the Territorial Quarrying Regulations. Order-in-Council (P.C. 1977-2860) issued the same date, pursuant to Section 93 of the Yukon Placer Mining Act, prohibits entering land within this reserve for purposes of locating a claim or prospecting for gold or other precious metal without the permission of the Minister of DIAND.

Dempster Pipeline Project¹⁸

The proponent of this project is Foothills Pipe Lines (Yukon) Ltd. of Calgary. This proposal involves the construction and operation of a natural gas pipeline for transmission of Mackenzie Delta gas in the Northwest Territories to near Whitehorse where it would link with the proposed Alaska Highway gas pipeline. The route would closely follow the Dempster and Klondike highways.

Possible environmental impacts include: degradation of permafrost-rich terrain, siltation, disturbance of fish habitat, displacement of wildlife species, specific adverse effects on the Porcupine herd of caribou, and aesthetic effects.

The project was referred to the Federal Environmental Assessment Review Office in January 1978. It is expected that the normal procedure for environmental assessment will apply. The Panel issued guidelines for preparation of an EIS in January 1979. It is expected that the EIS will be available in the summer of 1979 at which time the Panel will conduct a technical and public review of the EIS, and make recommendations to the Minister of the Environment concerning the implementation of the project.

Shakwak Project¹⁹

This project involves the reconstruction and paving of Haines Road from the Alaska-British Columbia border to Haines Junction, Yukon, and the Alaska Highway north from Haines Junction to the Alaska border, a total distance of about 516 km (321 mi.).

18 Environment Canada, Federal Environmental Assessment and Review Process, Registry of Panel Projects and Bulletin, Number 6, pp. 16-17.

19 Ibid, pp. 45-47 and Environment Canada, Report of the Environmental Assessment Panel Shakwak Highway Project (June 1978).

The project was registered with the Federal Environmental Assessment and Review Office and a Panel was established. Guidelines for preparation of an EIS were issued in May 1976.

The EIS was completed and submitted to the Panel December 30, 1977. The Panel held public hearings in Yukon, March 3-10, 1978. On May 5, 1978, the Minister of DOE announced that he endorsed the Panel's interim report and conclusion that, with appropriate conditions, the project could be carried out in an environmentally safe manner. The full Panel report was released to the public July 28, 1978. The Minister of DOE endorsed the recommendations of the Panel and has recommended acceptance of the Panel's findings to the Minister of DPW, the agency responsible for carrying out the project. The overall conclusion of the Panel was that: "... it will be possible to carry out the project without significant adverse environmental or social impact if appropriate procedures are followed and certain conditions are met and [the Panel] recommends that the project be allowed to proceed this year as scheduled."²⁰

Additional detail on this project is provided in Chapter XI.

South Yukon Transportation Study²¹

This study involves consideration of improvement of transportation systems within Yukon, primarily between Whitehorse and Ross River, with possible links to British Columbia, Alaska or Northwest Territories. Under consideration are one road development and several alternate railway strategies. The purpose of the project is to aid in development of the natural resource potential of Yukon. "Guidelines for the Preparation of an Environmental Analysis of Alternatives for the South Yukon Transportation Study" were issued by the Panel March 21, 1978.

20 Environment Canada, Report of the Environmental Assessment Panel Shakwak Highway Project, p. 37.

21 Environment Canada, Federal Environmental Assessment and Review Process, Register of Panel Projects and Bulletin, Number 6, pp. 50-51.

When the initiator, Transport Canada, has completed evaluation of alternatives and is ready to concentrate on a specific proposal, the Panel will decide what additional investigation will be required. The first phase of the study is expected to last several years.

OTHER ENVIRONMENTAL REVIEW PROCESSES AND PROCEDURES

In addition to the formal review process established under EARP, the various federal departments have their own environmental review processes and procedures that operate under particular federal statutes, regulations and rules.

For example, the federal DOE has a Regional Screening and Coordinating Committee (RSCC). This committee is comprised of representatives of various departmental agencies. It meets regularly, and was established to ensure that regional projects within the mandate of the department are registered and reviewed by appropriate agencies, and that a coordinated departmental response, if required, is provided on particular proposed developments.

Within DIAND there is a Director of Northern Environmental Protection at headquarters in Ottawa-Hull who is responsible for assessing all northern development projects and providing advice to the department on such projects.

In addition to these:

...environmental assessment is carried out by the territorial water boards in considering water licence applications under the Northern Inland Waters Act. The National Energy Board can assess environmental effects in considering certificate applications for pipeline facilities under the National Energy Board Act, and, in fact, has its own Environmental Assessment Division. The requirement, under Section 33.1 of the Fisheries Act, that information on proposed works or undertakings likely to result in deposit of deleterious substances in waters frequented by fish be submitted to the Minister of Fisheries and Environment (extended by Bill C-38) also establishes a form of environmental impact assessment. Another example in the northern context is the provision in the Territorial Land Use Regulations for a suspension of up to one year of land use permit applications decisions in order to permit study and evaluation. Finally, ad hoc task forces and commissions of inquiry

established under federal statutes may also be authorized to carry out environmental assessment.²²

Examples of the latter type of inquiry mentioned are the Mackenzie Valley Pipeline Inquiry of Mr. Justice Berger²³ and the Alaska Highway Pipeline Inquiry,²⁴ both mentioned previously in this chapter.

COMMITTEES INVOLVED IN ENVIRONMENTAL REVIEWS IN YUKON

There are a number of committees involved in reviews of proposed developments or which have been established to coordinate activities. Some of these have already been mentioned (e.g. the Land Use Advisory Committee, Federal-Territorial Lands Advisory Committee). Some are mentioned in subsequent chapters (e.g. Northern Exploration Facilities Program Committee) and will not be discussed here. In addition to these working level committees, there are a number of federal government committees which have been established at headquarters (Ottawa-Hull) to coordinate and provide information exchange on areas of mutual concern and issues related to the environment. Among such committees are the Interdepartmental Committee on Water and the Interdepartmental Committee on the Environment. The departments of DIAND and DOE have also established a headquarters committee, the Interdepartmental Environmental Review Committee, to serve as a forum for information exchange on areas of mutual concern and issues related to the environment north of 60°. In addition to these interdepartmental committees, individual departments have established committees to serve as forums for information exchange on environmental concerns in the area north of 60°.

22 A.R. Lucas and E.B. Peterson, "Northern Land Use Law and Policy Development: 1972-78 and the Future", p. 77.

23 Mr. Justice Thomas R. Berger, Northern Frontier, Northern Homeland: The Report of the Mackenzie Valley Pipeline Inquiry Volume One, April 15, 1977, and Volume Two, Terms and Conditions November 30, 1977.

24 Kenneth M. Lysyk, Edith E. Bohmer, and Willard L. Phelps, Alaska Highway Pipeline Inquiry (July 29, 1977).

An example is the Arctic Environmental Steering Committee of the federal DOE. This committee consists of two representatives from each of the Western and Northern, and Pacific and Yukon Regional Boards. It meets approximately every two months.

The above-mentioned committees will not be discussed. The Arctic Waters Advisory Committee is discussed here.

Arctic Waters Advisory Committee²⁵

All applications for offshore oil and gas exploration in Arctic waters must be reviewed by this committee. It is responsible for coordinating applicable federal legislation and for recommending environmental conditions which are included in any approval for offshore drilling, including the need for specific research projects before, during and after operation. The committee may also review certain mining operations, and gas gathering systems if these involve the use of Arctic waters. When a project has been approved, the committee is involved in an ongoing review and in establishing environmental operating conditions for specific sites. The committee is also responsible for ensuring that there is sufficient contingency planning for oil spill cleanup, disposal of drilling muds, use of chemicals and waste deposition. Federal and territorial officials comprise the membership of the committee (five members from DOE, three from DIAND, two from MOT, two from the government of the Northwest Territories and one from the Yukon government).

ECOLOGICAL SITES

As part of the International Biological Program (a cooperative program between the International Council of Scientific Unions and 58 participating nations to study the biological productivity of the earth's

25 Arctic Petroleum Operators' Association, A.P.O.A. Review, Vol. 1, No. 3. August (1978), p. 18 and Department of Indian and Northern Affairs, Procedures, Licensing, Legislation & All That, p. 4.

ecosystems and to relate this to human adaptability and welfare), the Canadian Committee for the International Biological Program - Conservation of Terrestrial Communities (CCIBP-CT) was established to evaluate and recommend natural areas, and to some extent, seminatural landscape units as reserves for the purpose of scientific study.²⁶

In Yukon there are a total of 12 designated International Biological Program sites covering a total area of 1 199 389 ha (2,963,690 a.).²⁷ These designated sites include areas which may have protected status at present (e.g. national park, game sanctuary) as well as those areas having no formal protection.

In Yukon, of the 12 designated areas, two areas comprising 44 000 ha (108,724 a.) have some protected status and ten areas comprising 1 155 389 ha (2,854,966 a.) have no formal protection.²⁸

CITIZENS' GROUPS INVOLVED IN ENVIRONMENTAL ISSUES

Organized citizens' groups have become increasingly active in voicing concerns and influencing the decisions taken which affect the environment. Discussed below are some of the more active groups involved with issues in Yukon related to land and land use planning.

Canadian Arctic Resources Committee (CARC)

This is a national organization whose objectives are: "To ensure that the important social and environmental ramifications of northern development are studied and analysed before major decisions relating to

26 David N. Nettleship and Pauline A. Smith, eds. Ecological Sites in Northern Canada (April 1975).

27 Environment Canada, Lands Directorate, Policy Research & Co-ordination Branch, "IBP - Designated Areas in Canada" (June 1978).

28 Ibid.

northern Canada are made. To provide means for exchange of information and viewpoints between people, government, and industry".²⁹

Among activities of the committee is funding of resource and land use studies to assist both government and industry to identify essential problems and avoid unnecessary social and environmental damage. CARC has funded legal research on northern legislation, regulations and regulatory procedures.³⁰ It has also sponsored workshops and conferences on northern issues.

Among studies funded by CARC which relate to land and water use in the Canadian north have been Land Management in the Canadian North³¹ and Water Management in the Canadian North.³² CARC participated in the Mackenzie Valley Pipeline Inquiry and appeared before the House of Commons committee studying Bill C-25, the Act to establish the Northern Pipeline Agency.

During 1978, CARC funded two studies regarding the legal and management issues involved in developing comprehensive conservation plans using northern Yukon as a case study.

Yukon Conservation Society

This group was formed in 1967 and its objectives are: "To secure the wise use, protection, and preservation of scenic, scientific, recreational, education, wildlife, and wilderness values of the Yukon Territory."³³

29 Environment Source Book, A Guide to Environmental Information in Canada, p. 52.

30 Ibid.

31 Kenneth P. Beauchamp, Land Management in the Canadian North (1976).

32 William MacLeod, Water Management in the Canadian North: The Administration of Inland Waters North of 60° (1977).

33 Environment Source Book, A Guide to Environmental Information in Canada, p. 69.

They have sponsored seminars and have produced publications on Yukon electrical power and the Dempster Highway. The Society has also been active in presenting briefs to Panels and inquiries which were established to review the proposed Alaska Highway natural gas pipeline project.

Yukon Fish and Game Association

This association represents the interests of hunters and fishermen in the territory. It has made representations to the environmental assessment panel on the Shakwak project.

ENVIRONMENTAL ISSUES

Environmental issues in Yukon include:

- the effect of proposed large-scale development projects on the environment e.g. hydro-electric, gas pipeline, mines, highway construction);
- water pollution;
- transport, storage and disposal of hazardous chemicals and petroleum products;
- solid waste management;
- abandonment and restoration plans for developments such as mines.

Policies and legislation adopted to deal with these issues include environmental impact statements, the federal Environmental Assessment and Review Process, 1977 amendments to the Territorial Land Use Regulations, and revisions to the Fisheries Act.

VI. AGRICULTURE

Agriculture is presently of limited importance in Yukon. Table 9 indicates that in 1976 there were only 17 farms in Yukon, of which 12 had sales of \$1,200 or more. In this same year there were 510 ha (1,261 a.) of improved land, and 1 126 ha (2,783 a.) of unimproved land, for a total of 1 637 ha (4,044 a.) of farm land.

Yukon agriculture has been summarized in a study completed in 1975.¹ The findings of that study confirmed conclusions made by previous agricultural workers and committees that there were about 121 410 ha (300,000 a.) of arable land in Yukon. However, because of climatic limitations, the need for heavy capital investment, the high costs of inputs, labour and transportation, the low yields and limited markets, farming in Yukon was financially unsound. The report also found that few aspiring farmers used the recommendations of the Soil Survey Report and the Agriculture Committee in land selection. Many farms are located on poor soil from both the aspects of surface conditions and fertility. Few operators have either adequate knowledge of farm operations, or sufficient equipment or capital to operate successfully. The crop most in demand was hay. However, because of the high cost of much needed fertilizer, its production is seriously limited. Grazing leases were found to be in poor condition and the terms of the lease do not permit improvements. As grazing is not confined to leases a problem of unrestricted grazing by horses, with serious encroachment on critical wildlife areas, was also observed. The production of cattle is limited because of cold winters, a short grazing season, high feed costs and lack of market facilities. The 1975 study observed that there were numerous private gardens that produce a variety of high quality vegetables and that interest was great for establishment of market gardens, although none existed.

¹ R.W. Peake and P.H. Walker, Yukon Agriculture: A Policy Proposal, p. 44

TABLE 9
SELECTED DATA AGRICULTURAL HOLDINGS YUKON 1931-1976

ITEM	UNIT	1931	1941	1955	1961	1966	1971	1976
Number of Farms ^a	Number	41	26	16	15	9	12	17
Number of Commercial Farms ^b	Number	N.A.	N.A.	4	2	N.A.	6	12
Total Area of Farms	ha (a.)	2 103 (5,197)	1 125 (2,781)	1 618 (3,997)	3 267 (8,072)	1 489 (3,680)	1 101 (2,721)	1 637 (4,044)
Improved Land	ha (a.)	315 (778)	207 (511)	257 (634)	386 (954)	187 (463)	574 (1,418)	510 (1,261)
Unimproved Land	ha (a.)	1 788 (4,419)	918 (2,270)	1 361 (3,363)	2 881 (7,118)	1 302 (3,217)	527 (1,303)	1 126 (2,783)
Crops								
Wheat	ha (a.)	3 (8)	11 (27)	9 (23)	17 (42)	8 (20)	1 (1)	8 (20)
Oats	ha (a.)	25 (63)	N.A.	21 (52)	31 (77)	8 (20)	36 (88)	N.A.
Barley	ha (a.)	226 (558)	159 (392)	6 (15)	2 (4)	4 (4)	51 (127)	294 (726)
Hay	ha (a.)	28 (69)	19 (47)	36 (88)	42 (104)	44 (108)	2 (4)	1 (1)
Potatoes	ha (a.)	2 (5)	1 (1)	7 (17)	5 (12)	2 (5)	1 (2)	1 (1)
Vegetables	ha (a.)			4 (9)	2 (5)	-	-	c
Livestock								
Horses	Number	62	90	172	230	17	42	c
Cattle	Number	72	52	104	206	98	146	193
Milk cows	Number	N.A.	N.A.	7	16	9	20	1
Hens & chickens	Number	224	138	296	358	635	857	1,154
Total Capital Value	\$	N.A.	N.A.	N.A.	N.A.	N.A.	478,900	997,611

N.A. - Not Available. No data were available from the 1951 Census.

a In order to maintain comparability of data, a farm includes those agricultural holdings of one acre or more with sales of agricultural products, during the 12-month period prior to the census, of \$50 or more.

b Includes those farms reporting sales of agricultural products of \$1,200 or more during the 12-month period prior to the census.

c Not asked in the 1976 census. With regard to total number of horses, the Yukon Wildlife Branch estimates that there are 1,200 - 1,500 horses in Yukon, of which about 800 are registered through the Brands Ordinance.

Sources:

R.W. Peake and P.H. Walker, Yukon Agriculture: A Policy Proposal, Table 4.
Statistics Canada, 1976 Census of Canada, Volume 11, Agriculture, Catalogue 96-800 (March 1978).

This same study suggested a policy for Yukon agriculture and outlined a series of recommendations. The main objective of the suggested policy was: "... to permit agricultural development where soil and climate features exhibit potential for production on land not involved in a more important land use program. The Policy will encourage only those participants with the necessary qualifications."²

AGRICULTURAL INPUTS

LAND

Table 10 indicates that the number of farms has dropped from a peak of 41 in 1931 to 17 in 1976, a decrease of over 100%. During the same period, the average farm size almost doubled, increasing from 51 ha (127 a.) in 1931 to 96 ha (238 a.) in 1976. The total farm area decreased from 2 103 ha (5,197 a.) in 1931 to 1 637 ha (4,044 a.) in 1976. The total area in farms and average farm size reached a peak in 1961 with a total of 3 267 ha (8,072 a.) for an average of 218 ha (538 a.).

The area of improved land has fluctuated between a low of 187 ha (463 a.) in 1966 to a high of 574 ha (1,418 a.) in 1971, see Table 9. Table 9 also indicates that hay has been the most significant item in crops.

LABOUR

Of the 17 farm operators identified in the 1976 census, six were owner operated, four tenant operated and seven part owner, part tenant. In 1971 the corresponding numbers were 4, 4, 4.

CAPITAL

The total capital value of the 12 farms in Yukon in 1971 was \$478,900 comprised of \$317,200 for land and buildings, \$121,000 for machinery and equipment and \$40,600 for livestock and poultry.³ In the 1976

2 Ibid., p. 53.

3 These individual figures do not add up to the total figure because of rounding used in the 1971 Census.

TABLE 10

YUKON CENSUS FARM POPULATION, NUMBERS, AND SIZE 1931-1976

Year	Number of Farms	Hectares Per Farm	Acres Per Farm	Total Farm Area Hectares	Total Farm Area Acres	Population on Farms
1931	41	51	127	2 103	5,197	74
1941	26	43	107	1 125	2,781	26
1956	16	101	250	1 618	3,997	40
1961	15	218	538	3 267	8,072	47
1966	9	165	409	1 489	3,680	62
1971	12	92	227	1 101	2,721	55
1976	17	96	238	1 637	4,044	< 5 ^a

^a The 1976 definition of a "Census Farm" differs from that used in previous censuses. This should be kept in mind when comparing historical data.

Sources:

1941 Census of Canada, Vol. 8; 1976 Census of Canada, Vol. 11. Agriculture, Catalogue 96-800; 1976 Census of Canada, Urban and Rural Population Distribution, Catalogue 92-807; and R.W. Peake and P.H. Walker, Yukon Agriculture: A Policy Proposal, Table 4.

census the figures were \$997,611, \$756,640, \$191,150 and \$49,821, respectively.

SOIL CAPABILITY FOR AGRICULTURE

During the summer of 1976 an exploratory soil survey and land evaluation of the Yukon Territory was carried out for the territorial government and DIAND.⁴

The areas surveyed were: Dawson-Stewart Crossing-Mayo; Pelly Crossing-Carcross-Faro-Ross River; Watson Lake; Whitehorse; and Snag. Because the Takhini-Dezadeash area had been surveyed previously, little new soil survey work was done in that area; the work there was primarily an assessment of grazing capability. Table 11 provides a breakdown of agricultural capability in the areas surveyed. This table indicates that in the areas surveyed, over one-half (55.4%) was rated as Class 5 (Class 1 has the highest agricultural capability, Class 7 the lowest).

This study pointed out that adverse climate places a severe restraint on agriculture in the Yukon. Approximately 85% of the area surveyed has insufficient heat units to consistently mature cereal crops for grain production. In addition, low rainfall in western Yukon can severely restrict the yield of cereals and forages.

The Whitehorse and Dawson map sheets generally have no reasonable extent of soils with a climate suitable for growing cereals. The Pelly Crossing and Carmacks map sheets have 46 996 ha (116,127 a.) of land with suitable climate but 63% of this land comprises soils too coarse in texture for cereal production. The McQuesten-Mayo area has 21 200 ha (52,385 a.) classified as Class 3 or suitable for cereal production and the Watson Lake area has 4 800 ha (11,861 a.) of Class 3 soils. Of the soils in regions too cool for cereal grains, 53% are rated as Agricultural Capability Class 5 or suitable for seeded forages, 17% are Class 6, suitable only for native grazing and 30% are Class 7 or non-agricultural.

⁴ H.P.W. Rostad, L.M. Kozak, and D.F. Acton, Soil Survey and Land Evaluation of the Yukon Territory (1977).

TABLE 11
AGRICULTURAL CAPABILITY CLASSES IN AREAS SURVEYED 1976

AREA	CLASS							Total ha	Total a.
	3 and 4 ha	3 and 4 a.	5 ha	5 a.	6 ha	6 a.	7 ha		
Dawson-Stewart Crossing - Mayo	24 380	60,243	166 912	412,440	17 238	42,595	133 613	330,158	342 143
Pelly Crossing - Carmacks	27 730	68,521	143 721	355,135	17 127	42,321	67 691	167,264	256 269
Watson Lake	10 447	25,815	209 267	517,099	267	660	97 737	241,508	317 718
Faro-Ross River	644	1,591	31 912	78,855	67 235	166,138	12 768	31,550	112 559
Whitehorse	73 240	180,976	17 472	43,173	79 278	195,896	169 990	420,045	
Takhini-Dezadeash	126 215	311,877	14 887	36,786	26 178	64,686	167 280	413,349	
Snag	35 821	88,514	2 018	4,984	17 766	43,900	55 605	137,398	
TOTAL	63 201	156,170	787 088	1,944,896	136 244	336,657	435 031	1,074,962	1 421 564
% of Total		4.4			55.4		9.6	30.6	100.0

Note: Because of the adverse climate, there are no soils in Yukon rated Class 1 or 2 for agricultural capability.

Source:
H.P.W. Rostad, L.M. Kozak, and D.F. Acton, Soil Survey and Land Evaluation of the Yukon Territory, Table 1, p. 5.

It is possible to grow vegetables in all regions. However, the range of varieties decreases and more use is made of greenhouses as it gets cooler.⁵

Grazing Capability

There are some areas in the Yukon where the productivity of the native forages are adequate to allow grazing by livestock. In general, these areas were located close to population centres. Because of the low annual precipitation (260-300 mm) and the frequent forest fires, the grass species form a fair proportion of the plant community. On new burn areas some soil types support a lush forage growth for a number of years before the tree canopy closes over. In other areas the trees are spaced so widely enough spaced that vigorous grass growth occurs even in the presence of mature stands of trees. Still other areas are too dry (south facing slopes), too wet (meadows), or too saline for tree growth and this allows good growth of grasses or sedges.

The treed areas with some grazing potential have an annual yield of approximately 100-450 kg/ha of grazable forages. Areas with less than 100 kg/ha productivity are not considered to have a significant grazing potential. Open areas such as meadows or saline areas have productivities ranging up to 200 kg/ha and are suitable for hay production.

With regard to land capability for grazing in the survey area, approximately 1 156 285 ha (2,857,180 a.) were rated as Class 7 (no grazing capability), 221 479 ha (547,275 a.) as Class 5 (10-100 kg/ha) and 32 053 ha (79,203 a.) as Class 3 or Class 4 (100-450 kg/ha).⁶

In terms of carrying capacity of grazing land, at present DIAND has an administrative standard (not spelled out in legislation) that a lessee must run at least one head of livestock for each 16.2 ha (40 a.) of land leased. Section 12(2) of the Territorial Lands Regulations stipulates that a lessee must run at least one head of livestock for each 12.1 ha (30 a.) of land leased.

⁵ Ibid., pp.3-5.

⁶ Ibid., p. 6.

IMPLICATIONS FOR YUKON AGRICULTURE

The results of the soil survey and land evaluation study which were published in 1977, confirmed the conclusions of the 1975 study prepared for the Yukon government. This first mentioned report describes agricultural and grazing potential in Yukon as follows:

Due to the scarcity of markets and the high costs of inputs, the main agricultural enterprises will necessarily be oriented to livestock production and garden crops for local consumption.

To serve the present local market, livestock numbers (cattle) would need to be approximately 6000. This assumes an annual slaughter of 2000 head of cattle to feed a population of 25,000. A livestock industry of this size would require approximately 10,000 hectares of seeded hay land and 55,000 hectares of Class III and IV grazing land.

If residents of the Yukon consume as much vegetables as the average Canadian, then a population of 25,000 could be supplied by 80 hectares of potatoes, 10 hectares of cabbages and 15 hectares of carrots. It is unlikely, however, if local growers or producers could capture the whole local market. In fact, many provinces in Canada don't supply all of their own vegetables or meat but import some from other areas.

There is a potential for livestock production or market gardening in certain areas. Both types of enterprises must however locate on suitable soil types and in favored locations to minimize input costs and costs related to selling the produce.

Livestock enterprises should locate in areas with soils of high native grazing capability and on soil types especially productive for growing hay for winter feeding. Some areas with good grazing potential are the French Creek, Pelly River, Lake Laberge and Takhini burn areas. Market gardens are best located on the floodplains of the larger rivers. The most suitable soils for this purpose, those of the Stewart Crossing, Pelly Crossing, and Carmacks Associations are neutral, fertile and often high in organic matter. They will also usually have favorable climate although some depressional areas may have frost hazards. The Whitehorse area with the largest market potential has a poor climate for market gardening; although some of the lowest floodplains with good air drainage to the river or gentle south-facing slopes may be suitable for this purpose.

At the present time there is a steady market for baled hay for winter feed for horses belonging to Big Game Outfitters or urban residents. An immediate expansion in this market would be realized if Outfitters overwintered their horses in the Yukon and kept them from grazing during the winter months.

In addition to livestock production and market gardening, many other types of agricultural operations are possible. Milk production or dairying is feasible if the problems of fluid milk marketing can be overcome. Seeded forages for hay and pasture would also be necessary. Swine production is feasible if locally grown barley and oats can be obtained at reasonable prices. Poultry and egg production is possible but they also require grain and protein supplement for feed and also heated housing for the winter months. Sheep could be raised utilizing native range but would need to be protected from predators. Honey production is feasible and has been practised in various locations in the Yukon. The main requirements for successful honey production are willows and wild flowers in the spring, and fireweed, clovers, and other legumes in July and early August (Harris et al., 1972). Rapeseed as a cash crop can be grown in climatically favorable areas but the cost of marketing the grain would be high.⁷

There appears to be potential for part-time farming in Yukon. It is thought that greenhouse operations around Whitehorse may have some potential, although it is estimated that the addition to the labor force would be very small, six to ten workers by 1985.⁸

THE FUTURE - AN AGRICULTURAL AND GRAZING POLICY

The enactment of the Territorial Lands Act removed the provision for homesteading (which was included in the Dominion Land Act) in the Territories. In addition, there is no other general form of assistance available from the federal government for agricultural endeavors.⁹

The discussion regarding disposition of both federal Crown land and territorial land for agricultural purposes appeared in Chapter III.

⁷ Ibid., pp. 6-8.

⁸ Department of Public Works, Pacific Region, Program Planning and Coordination, Yukon Forward Plan, p. 6, citing D.W. Carr and Associates Ltd., The Yukon Economy: Its Potential for Growth and Continuity, Vol. I, a report prepared for the Department of Indian Affairs and Northern development and the government of the Yukon Territory (Ottawa, 1968), p. 202.

⁹ Department of Indian and Northern Affairs, The Acquisition of Crown Land in the Yukon Territory, p. 5.

It was mentioned there that since January 10, 1975, there has been a moratorium on disposition of federal Crown land for agricultural and grazing purposes pending identification of potential agricultural areas and the development of long-term disposal policies by the federal and territorial governments.

Section 16(v) of the Yukon Act gives the territorial government authority to make ordinances related to agriculture. While the responsibility for development of agricultural policy rests with the territorial government, the Land Management Division of DIAND has been funding necessary research studies, such as soil and climatological surveys, in order to identify potential agricultural areas and develop long-term disposal policies for federal Crown land. For example, during 1975-76 an agrometeorological study was carried out in Yukon by the Atmospheric Environment Service of the federal Department of the Environment for DIAND. In 1976, the previously mentioned Soil Survey and Land Evaluation of the Yukon Territory was carried out for DIAND and the results published in 1977.

The Yukon government has also been carrying out studies with respect to agriculture. A report Yukon Agriculture: A Policy Proposal was prepared for them in 1975. The Department of Local Government's November 1977 discussion paper on "Land: Its Development and Disbursement" also made some recommendations regarding agricultural and grazing leases.

Many of these studies have made recommendations on agriculture and/or grazing policy. Based on these studies and their recommendations, as well as additional information, new policies regarding agriculture and grazing are presently under review.

LAND USE ISSUES RELATED TO AGRICULTURE

Issues associated with agricultural land uses in Yukon are:

- the absence of an agricultural and grazing policy;

- a split in responsibility between federal government and territorial governments; the federal government has responsibility for land disposition while the territorial government has responsibility for development of an agricultural policy.

In an attempt to deal with these issues DIAND and the Yukon government have funded studies regarding the capability and potential for agricultural development in Yukon. Long-term land disposal policies for northern agriculture are now under preparation.

VII. FORESTRY

Approximately 219 000 km² (84,556 mi.²) or 40.8% of the total area of Yukon is estimated to be forest land.¹ This total consists of an estimated 67 000 km² (25,869 mi.²) of productive forest land and 152 000 km² (58,687 mi.²) of unproductive forest land. It is estimated that 23 000 km² (8,880 mi.²) of the productive forest land is economically accessible.

The annual allowable cut² from productive forest land in Yukon is considered to be 3 098 000 m³ (109,390,380 ft.³). It is estimated that in the five year period April 1 - March 31, 1970-1975, an annual average of 72 000 m³ (2,542,320 ft.³) of timber was harvested in Yukon. This represents only about 2.3% of the annual allowable cut. Fire destroyed approximately 1 924 000 m³ (67,936,440 ft.³) of forest over an area of 295 km² (114 mi.²) during the calendar year 1976.

In the 1977-78 fiscal year, 120 586 m³ (4,257,892 ft.³) of wood was cut in Yukon. This consisted of 95 750 m³ (3,380,933 ft.³) of lumber, 21 806 m³ (769,970 ft.³) of cordwood, and 3 030 m³ (106,989 ft.³) of round timber.³ Round timber consists of products such as posts, pilings, building logs and mine props. White spruce is the main commercial species in the territory.

1 These and other statistics in this section, unless otherwise indicated, are taken from Fisheries and Environment Canada, Canadian Forestry Service, Forest Management Institute, National Forestry Statistics Survey (1977).

2 Defined as the volume of wood which may be harvested, under management, per year.

3 Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 39.

As mentioned in Chapter II, Yukon's forest industry is small with only 18 operating sawmills in 1978. Most of these are small, portable sawmills but a few semi-permanent ones are located in the Watson Lake area, the main centre of forest activity in Yukon.

It is estimated that 94 people were employed in the Yukon forest industry in 1977, 49 were employed in mills that operated for six months or less during the year.⁴

GOVERNMENT AGENCIES AND LEGISLATION

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT (DIAND)

The Yukon Forest Service of DIAND is responsible for forest management and forest fire protection in Yukon. This includes timber disposal, fire prevention and fire suppression. DIAND's policy of forest management is based on the necessity to protect the timber potential, to gradually inventory the timber resources of Yukon, maintain accurate forest utilization data, and gather information in order to achieve the most economical and practical means of maintaining a lumber industry in Yukon. Assistance in carrying out this policy is provided by the federal Department of the Environment (primarily Canadian Forestry Service and Forest Management Institute), which acts as a forestry consultant on request, and will carry out programmed surveys, disease and insect surveys, and other research projects designed to meet the needs of the Yukon Forest Service.⁵ A more detailed discussion of this work is provided later in this chapter.

The disposal and administration of timber lands is provided for under the provisions of the Territorial Timber Regulations which have been issued pursuant to the Territorial Lands Act. Within DIAND there is

4 Foothills Pipe Lines (South Yukon) Ltd., Environmental Impact Statement for the Alaska Highway Gas Pipeline Project, p. 7-26.

5 Department of Indian and Northern Affairs, Yukon Forest Service, "Forestry in the Yukon Territory".

a Forest Resources section (Yukon Forest Service) headed by a Regional Manager of Forest Resources (Superintendent of Forestry under the Territorial Timber Regulations). Under him are Resource Management Officers (RMOs) located in ten regions throughout the Territory (see map 3). As mentioned in Chapter III, the RMOs serve as the land use inspectors under the Territorial Land Use Regulations and Territorial Lands Regulations. They also administer and enforce the Territorial Timber Regulations in the field, which include the issuance of cutting permits, inspection of logging and sawmill operations, scaling of wood cut and provision of some technical assistance to the forest industry.

In addition to his designation as Superintendent of Forestry under the Territorial Timber Regulations, the Regional Manager of Forest Resources, DIAND, in Whitehorse, is designated as Forest Supervisor by appointment of the Commissioner under the Yukon Forest Protection Ordinance. Other federal officers in the Forest Service are designated as forest officers under this same ordinance.

TERRITORIAL TIMBER REGULATIONS

These regulations apply to the cutting and removal of timber on territorial lands which are under the control, management and administration of the Minister of DIAND i.e. all land in Yukon except Commissioner's lands.

The regulations establish a permit system for the cutting and removal of timber. A permit may be issued to anyone over 18 years of age or to any corporation upon payment of dues as calculated in the regulations (S.4). The area covered by a permit is determined by the maximum value of timber which may be obtained in any one year, which is 2.5 million feet board measure, (S.5(1)). A permit may not be issued to any person already holding a permit, without the approval of the Superintendent of Forestry (S.5(2)). Once a permit has been obtained, cutting operations in the area for which the permit was issued must begin within six months of the date of issue of the permit (S.6(2)).

Permits may be issued, without the payment of a fee, to any educational, religious, or charitable institution, or hospital in the territories, for removal of timber required for its own use; to any person to cut or remove timber for purpose of land clearing; to any federal government department, municipality, school district, territorial commissioner, for their own use; and to a territorial resident to cut up to 25 cords a year for his or her own use (S.7).

Unless another date of expiry is stated in the permit, it is good for one year or when the specified amount of timber has been cut, whichever is earlier (S.12).

In addition to the foregoing, the following persons may cut up to 25 cords of timber in any twelve month period for his or her own use without a permit: every person living a nomadic life; every trapper on his trapline; every prospector while prospecting; or, every person engaged in exploration or scientific pursuits while so engaged (S.8). A permit does not allow the holder to construct a road or structure on the land unless given permission from a forest officer (S.19). No one, except with the permission of the Minister of DIAND, is allowed to cut timber within 61 m (200 ft.) of a public road or the ordinary high water mark on the shore of any lake (S.21). The regulations also cover the payment of timber dues and the seizure of timber unlawfully cut.

In Yukon, three "timber agreement areas" have been awarded directly by the Minister. These agreements give a ten-year renewable tenure to large commercial operators. Two of these three are currently active, both in the Watson Lake area.

FOREST PROTECTION ORDINANCE

Although the forests of the territories are a federal responsibility and administered under federal legislation (Territorial Lands Act and Territorial Timber Regulations), forest protection is controlled by each territory under its own Forest Protection Ordinance. Traditionally the

councils of the territory have made forest protection their own legislative responsibility.⁶ In Yukon this is the Forest Protection Ordinance, the provisions of which apply to every municipality in Yukon as defined in the Municipal Ordinance. The Forest Supervisor and forest officers designated in the ordinance are federal officials in the Forest Resources Division of DIAND, appointed by the Commissioner to administer the ordinance.

The ordinance deals with matters related to burning of slash and debris during clearing rights-of-way, closed seasons, burning permits, and fire-fighting assistance. The Yukon Forest Service issues timber permits on Commissioner's lands under the ordinance.

FOREST FIRE PROTECTION

Fire has played a dominant role in shaping the vegetation pattern in Yukon. The present forests of the territory have developed from a continuous history of fire and it is only along the rivers that any mature forest exists.⁷ The Yukon Forest Service has divided the territory into four levels of priority zones for fire-control purposes. The highest priority is given to areas containing communities, travel and communication routes, and high-value timber. Fires in the high priority zones will be fought; whereas those in low priority zones may be left to burn themselves out.⁸ However, the degree of fire protection varies from year to year, depending on fire hazard conditions and availability of manpower and equipment.

A Reciprocal Forest Protection Agreement exists between the government of Canada and the province of British Columbia. This agreement provides a buffer zone along the provincial-territorial boundary where either

6 Department of Indian and Northern Affairs, The Forests of Northern Canada (1973), p. 7.

7 Department of Indian and Northern Affairs, Yukon Forest Service, "Forestry in the Yukon Territory", p. 6.

8 "Fire Hazard Down, New Crews Ready", Yukon News, May 24, 1978.

fire protection agency may take action. A similar agreement exists between Yukon and the State of Alaska. Forest service staffs meet periodically to discuss and define areas of responsibility in case of border fires.⁹

During the 1978 season, 102 forest fires burned in Yukon compared to 126 in 1977. The Yukon Forest Service fought 89 of these fires (compared to 88 in 1977). The total area burned in 1978 was 7 396 ha (18,276 a.) compared to 277 074 ha (684,650 a.) in 1977.¹⁰

DEPARTMENT OF THE ENVIRONMENT (DOE)¹¹

The federal Department of the Environment, more specifically the Pacific Forest Research Centre of the Canadian Forestry Service and the Forest Management Institute, provide advice and assistance to DIAND in carrying out programmed surveys, disease and insect surveys, forest fire research and other research projects designed to meet the needs of the Yukon Forest Service.

A reconnaissance level biophysical survey of Yukon was conducted in 1975 by officers of the Canadian Forestry Service. The results of this work were published in 1977.¹² Twenty-two ecoregions were described in terms of available biophysical data. This same Service also developed Yukon RRAMS, an information retrieval system for renewable resource management statistics. The data on the forestry file are available and accessible from terminals in Whitehorse.

⁹ Department of Indian and Northern Affairs, Yukon Forest Service, "Forestry in the Yukon Territory", p. 3.

¹⁰ "A Successful Year for Fire Control", Yukon News, November 1, 1978.

¹¹ Department of Indian Affairs and Northern Development, 1976-1977 Government Activities in the North, Document ND 529 (1977) pp. 73-74.

¹² E.T. Oswald and J.P. Senyk, Ecoregions of Yukon Territory, Fisheries and Environment Canada, Canadian Forestry Service (June, 1977).

An integrated resource survey, encompassing timber and wildlife needs within a biophysical framework, is being carried out for the Nisutlin River forest management unit. This study is based on the use of large-scale aerial photography and minimum ground sampling to provide quantitative estimates of forest resource and the capacity of the land to carry various species of wildlife. It is an operational test of current survey technology and the results of this experimental work will be evaluated for its general applicability to inventory in Yukon. The survey is being carried out on a cooperative basis by the Yukon Forest Service, DIAND; Pacific Forest Research Centre, DOE; and Forest Management Institute, DOE.

Cooperative programs with, and advice to, the Yukon Forest Service are also provided by the above DOE agencies on matters such as forest regeneration, insect and disease survey and forest fire research.

FORESTRY LAND USE ISSUES

Among the land use issues associated with forestry are:

- environmental effects of harvesting practices;
- regeneration techniques;
- lack of sufficient information on the forest resource to allow for long-range planning of forest resource use (e.g. the only record of timber cutting is the permits issued).

In an attempt to deal with some of these issues, DIAND, in cooperation with DOE (Canadian Forestry Service and Forest Management Institute), is engaged in experimental research programs to obtain more precise information on the forest resource of the territory.

VIII. RECREATION

BACKGROUND¹

Yukon has been characterized as: "A vast, relatively untouched wilderness, with a single major population centre and a string of comparatively small communities located upon a network of perhaps half a dozen major highways, depends for its economic activity upon major consumptive and non-consumptive resource-based industries, primarily mining and tourism. The generally unspoilt character of the natural environment is especially emphasized as the foundation for a potentially large recreation industry, for the tourist and resident alike."²

The first tourists to Yukon came during the Klondike gold rush. The building of the Alaska Highway provided an easier means for travelling to Yukon. Over the last decade improvements to this highway, development of charter and package tours, and resource attractions such as Kluane National Park, have contributed to the development of the tourist industry. It was mentioned in Chapter II that today tourism is considered to be Yukon's second largest industry, providing employment for an estimated 20% of the total labour force of Yukon. In 1978 an estimated 364,000 tourists spent \$33 million in Yukon. During 1978, highway traffic increased 33%, air traffic increased 19% and train traffic decreased 19%. The length of stay generally showed increases over 1977. Visitor origins for 1978 remained about the same as in 1977 with U.S.A., Canada and visitors from other countries representing 71%,

1 Based primarily on Thomas L. Burton, Outdoor Recreation in the Yukon, the final report of a Yukon Residents' Outdoor Recreation Survey. Prepared on behalf of the government of the Yukon Territory and Parks Canada (December 1977).

2 Ibid., pp. 5-6.

23% and 6%, respectively, of the total number of visitors to the Territory. There was a continuing trend of declining number of Alaskans visiting Yukon.³

In addition to Kluane National Park, major tourist attractions include the national historic sites associated with the Klondike gold rush at Whitehorse and Dawson, and the diverse landscape of the territory which includes the vast network of lakes and rivers.

In the last few years several studies have been carried out in Yukon to identify the primary characteristics of Yukon's tourist industry. In 1975 a joint study was carried out by the territorial government and Parks Canada (The Yukon Exit Survey). This study was the first major examination of the characteristics of tourist behaviour. That study revealed that most visitors to Yukon were travelling through the territory on their way to some other destination.

A second study carried out by B.C. Research in 1976 for Parks Canada, examined visitors to the historic city of Dawson.

These two studies were the major ones in the last few years of visitors to Yukon. Using information from these studies, as well as that from additional studies carried out for other agencies, a reasonably good data base of numbers, characteristics, major activities, and expenditures of Yukon visitors was established. At the same time, little was known about the recreation activities of Yukon residents. Therefore, to complement the information on Yukon tourists, a study of Yukon residents jointly sponsored by the Yukon government and Parks Canada was carried out in 1977 by researchers from the University of Alberta.⁴

The main purpose of the study was: "...to provide data on outdoor recreation activity patterns of persons living in the Yukon Territory, which could serve as base data for the development of master plans for outdoor recreation areas and facilities in the Territory and for Kluane

³ R.D. Graham, Yukon Tourism 1978 Industry Highlights (January 1979), pp. 5-8.

⁴ Thomas L. Burton, Outdoor Recreation in the Yukon (December 1977).

National Park.⁵ The study was concerned with residents only and excluded activities that usually make use of urban facilities (e.g. football, basketball, etc.).

The survey covered 811 persons (approximately 5% of the Yukon population aged 16 years and over). These 811 people completed a self-administered questionnaire concerning their participation in 17 selected outdoor recreation activities in 1976, their vacation patterns in 1975 and 1976, their satisfaction with outdoor recreation experiences, and their proposals for future planning, development and management of territorial recreation areas and facilities, as well as Kluane National Park.

Table 12 provides a ranking of the 17 activities according to participation rates of respondents. Although the study cautions that at the time it was done, there was no basis for comparing the characteristics of the surveyed population to the Yukon population as a whole, it was assumed that the surveyed group was a relatively good representation of the overall population.⁶

The study found that Yukon residents are generally much more involved in outdoor pursuits than the entire Canadian population. Although participation rates are higher for Yukoners, they are still quite low in themselves. For example, Table 12 indicates that only three out of seventeen activities had a participation rate of 50% or more. These activities are: driving for pleasure/picnicking, fishing/ice fishing and nature study/sightseeing/photography.

The study also revealed that the Yukon resident participates in a much wider range of activities than the Yukon tourist. In the past, provision of facilities for tourists appeared to have been given more attention than the need for outdoor recreation opportunities for residents. Although tourism will continue to be an important part of the outdoor recreation package, the activities of residents are likely to be of increasing relative significance.

5 Ibid., p. 9.

6 Ibid., p. 36.

TABLE 12

PARTICIPATION RATES BY YUKON RESIDENTS FOR 17 OUTDOOR RECREATION ACTIVITIES

Rank	Activity	Number of Participants	Number of Respondents
1	Driving for Pleasure/Picknicking	625	77.0
2	Fishing/Ice Fishing	568	69.9
3	Nature Study/Sightseeing/Photography	414	51.0
4	Tent Camping	384	47.3
5	Visiting Historic Parks/Sites	363	45.7
6	Hunting	359	44.4
7	Trailer/Motorhome/Pick-up Camping	331	40.8
8	Hiking/Backpacking	327	40.3
9	Motor Boating/Water Skiing	291	36.0
10	Swimming/Scuba Diving	286	35.3
11	Snowmobiling	239	29.5
12	Canoeing/Kayaking/Rowing	220	27.0
13	Cross Country Skiing	219	26.9
14	Mountain Climbing	148	18.2
15	Snow Shoeing	144	17.9
16	Trail Biking	110	13.6
17	Dog Sledding	55	6.8
Total Sample		811	100.0

Source:

Thomas L. Burton, Outdoor Recreation in the Yukon, Table 047, p. 173.

The report also indicates that: "The Yukon Territory is one of the few places left on the North American continent where the urban recreationist is free to move about almost at will into a vast, relatively unplanned natural environment. It would seem that a significant number of Yukoners would like this to continue."⁷ At the same time there was a large number whose activities focussed on planned areas (public and private campgrounds) where the emphasis is on organized facilities with planned, but limited amenities. The report indicates that the implications of the divergent views are, that those who must develop future policies and plans will have to balance these views.

Although the majority of Yukon residents live in urban areas, they appear to retain an attraction to the natural environment which is not generally found in more highly urbanized regions of southern Canada. The kinds of outdoor recreation and the rate of participation reflect this. The outdoor recreation opportunities are not as organized, regulated and controlled as they are in more industrialized and urbanized parts of the country.

It has been stated that: "The challenge for those responsible for the future planning, development and management of outdoor recreation in the Territory is to retain these features of openness in the face of the increasing pressures that urbanization and industrial development will surely bring."⁸

GOVERNMENT AGENCIES AND LEGISLATION

DEPARTMENT OF RENEWABLE RESOURCES

Parks and Historic Resources Branch

This Branch of the Renewable Resources Department is responsible for planning, developing and administering outdoor recreation areas for Yukon residents and tourists including campgrounds, parks for day use, and historic sites.

⁷ Ibid., p. 167.

⁸ Ibid., p. 171.

Campgrounds

Yukon campgrounds started in the 1940s when the Yukon Forest Service tried to group overnight campers into common areas as a means of forest fire control. During this period, and the 1950s and 1960s, about 40 campsites were developed. There was no overall plan for locating these areas and individual forestry officers were responsible for locating and developing campgrounds in their respective districts. In 1972 the campground program was transferred to the Tourism and Information Branch of the Yukon government. On April 1, 1976 the Historic Parks and Sites Division was created and took over responsibility for the campground system. This division was transferred to the Department of Renewable Resources in 1977.

"It was only in the spring of 1976 that an initial move was made to begin planning for an organized system of campgrounds and day-use areas (picnic sites) throughout the territory."⁹

The present campground system in Yukon comprises a large number of campgrounds (48), catering specifically to transient campers. It is an unplanned system of a non-recreational nature reflecting the history of campground development in the territory.

Territorial Parks

Although the campground program was transferred from the Yukon Forest Service to the territorial government in 1972, the actual transfer of land in some cases did not take place and the land remains under reservation to the federal Yukon Forest Service. The land occupied by some of the transferred campgrounds has been conveyed by Order-in-Council to the territorial government (Commissioner's lands); whereas some has been set aside by reservation only (DIAND retains administrative and management rights over the land). The territorial government has also identified specific land areas in which it has an interest

⁹ G. MacKenzie-Grieve, Yukon Government Campgrounds Planning Report 1976, p. 9.

for recreational purposes. Some of these proposed recreational reserves have been approved by DIAND and reserved in departmental files in the name of the Yukon government; some have not been approved, and in some instances, the interest of the Yukon government has been noted in DIAND files with no further action being taken pending native land claims settlement.

The Yukon government and DIAND are currently involved in a cooperative program to clarify the land status of campgrounds, recreation areas, historic sites, and prime recreation sites with the view to their eventual transfer to the Yukon government to form part of a territorial park system as circumstances permit.

Partly because of the unavailability of land, a territorial parks system has been slow to evolve. The Executive Committee of the Yukon government endorsed the orderly development of a territorial park system in 1974. However, there is still no policy and no legislation related to territorial parks. Funds for planning purposes have now been identified and a parks planner has recently been hired. Site plans for existing campgrounds are presently being prepared.

Two planning surveys related to parks have been carried out recently: Yukon Government Campgrounds, Planning Report 1976 and Outdoor Recreation in the Yukon, 1977. Both of these reports have been discussed previously in this chapter.

There is no territorial ordinance that specifically designates campgrounds or territorial parks. A territorial parks ordinance is being prepared and it is anticipated that it will not be tabled in the legislature prior to the fall of 1979.

Historic Resources

There is territorial legislation that allows for designation of historic sites of territorial significance, the Historic Sites and Monuments

Ordinance. This ordinance and accompanying regulations allow the Commissioner to designate and acquire historic places, and lands or things of historic value (S.3). The ordinance also establishes a Historic Sites and Monuments Board of up to fifteen members whose duties consist of recommending sites to be preserved or maintained (S.4). In addition, under the regulations the board: "...shall be required to prepare a long range Territorial program under which regional and thematic priorities will be established and a comprehensive program laid down for the marking, preservation and development of historic sites throughout the Territory." (Commissioner's Order 1969/132 S.11). A study was completed for the Yukon government in 1974 on the historic sites in Yukon.¹⁰

DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS

This department assumed responsibility for highway rest stops from the Parks and Historic Resources Branch of the Department of Renewable Resources on April 1, 1978. The Department of Highways and Public Works is responsible for the cost of the development and maintenance of highway rest stops, although they may request the assistance of the Parks and Historic Resources Branch in developing the area.

DEPARTMENT OF EDUCATION

Recreation Branch

This branch deals with the provision of urban-oriented organized types of recreation activities normally provided by local government. It will not be discussed in detail here since its relationship to land use planning is not as significant as the outdoor recreation types of activities. It will be sufficient to mention that there is a Recreation Development Ordinance which relates to provision of administrative and financial assistance to communities and establishes a twelve-member "Yukon Recreation Advisory Committee".

¹⁰ Synergy West Ltd., Historic Sites Evaluation Yukon, prepared for Tourism & Information Branch, Government of the Yukon Territory (November 1974).

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT (DIAND)

PARKS CANADA

The basis for Parks Canada policies is the protection of places of natural and cultural significance of national importance. The National Parks Act, approved by parliament in 1930, established legislative protection for national parks. Section 4 of that Act provides the only statement in the Act on the general purposes of national parks. It states: "The Parks are hereby dedicated to the people of Canada for their benefit, education and enjoyment, subject to the provisions of this Act and the regulations, and such Parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations."

In 1953 the Historic Sites and Monuments Act was enacted. It established the Historic Sites and Monuments Board as an advisory body to the Minister of DIAND and gave the minister statutory responsibility for developing and carrying out a national program commemorating persons, places and events of national historic and prehistoric interest.

Policies regarding national parks and national historic sites were prepared and issued in 1964 and 1967 respectively. These policies emphasized protection of natural and historic resources, interpretation and educational activities, and planning of such areas. Since these policies were issued there have been a number of developments which have taken place, including a rapid increase in the number of parks and sites. Among new initiatives launched during this period, there was a proposed program of "Byways and Special Places"¹¹ - national landmarks, wild rivers, natural marine parks, historic land trails, historic waterways and scenic and historic parkways. Because of these changes and the need to have a statement to guide future initiatives and

¹¹ This program is now known as "Agreements for Recreation and Conservation (ARC)".

undertakings, Parks Canada has prepared a policy paper for discussion.¹² Discussions on this policy paper were completed in 1978 and it is expected that this revised policy will be made public early in 1979.

NATIONAL PARKS

The National Parks Branch of DIAND has generally managed these parks to preserve the natural landscape and develop an understanding and appreciation of the landscape resources by the people of Canada. Parks Canada has separated the land and water areas of the country into 48 natural regions (39 terrestrial and 9 marine). Parks Canada feels that each of these natural areas should be represented in the national parks system and any potential new parks are selected from representative natural areas of Canadian significance or areas representative of one of the natural regions. One of the newest national parks in Canada, representative of the North Coast mountains natural region, is Kluane National Park, located in southwest Yukon.

Kluane National Park

At present this is the only national park in Yukon. It is located in the southwest corner of the territory and is bounded on the west by Alaska and on the south by British Columbia. Portions of the north and east boundaries lie adjacent to the Alaska Highway and Haines Road (Map 1).

In 1942 a Privy Council order was passed creating a National Park Reserve of 26 237 km² (10,130 mi.²) of land lying west and south of the Alaska Highway. In 1943 the area was designated the Kluane Game Sanctuary until the schedule of the National Parks Act was amended to establish Kluane National Park. In 1958 the National Parks Branch of DIAND began to actively pursue establishment of a national park in the

¹² Department of Indian and Northern Affairs, Parks Canada, "Parks Canada Policy, Draft, for discussion only" (February 1978).

area. On February 22, 1972, an Order-in-Council set aside 22 015 km² (8,500 mi.²) of the Kluane Game Sanctuary for use as a national park. In 1976, official proclamation of the park reserve took place. Kluane National Park is now administered under the National Parks Act. The reserve status reflects the possibility of adjustments to the park area as a result of native land claims. The Act also allows for the exercising of traditional hunting, trapping and fishing activities in the park by people of native origin.¹³

Among the special features of Kluane National Park is the interior icefield region, the longest non-polar glacier system in the world. Also located in Kluane is Canada's highest peak, Mount Logan, 6 050 m (19,850 ft.) above sea level. Three main vegetation communities - montane forest, subalpine shrub and alpine tundra - are also represented in the park as are their associated wildlife populations. The park provides one of the few remaining refuges in North America for Dall sheep and grizzly bear.

In order to preserve these unique features and interesting landscape characteristics, Parks Canada has embarked on the development of a comprehensive plan for the park. The broad objectives for the park are:

- a) to preserve for present and future generations, representative natural and historical features of the "Northern Coast Mountain" Natural Region in particular and Canada in general.
- b) to allow for the natural evolution of park landscapes and ecosystems subject to the protection and perpetuation of plant and animal species native to the area.
- c) to provide opportunities for the public to experience the park, and learn about the natural systems within it through both personal contact and park-sponsored interpretive and orientation programs.
- d) to provide opportunities for outdoor recreational opportunities which are compatible with preservation of the natural resources of Kluane National Park and which are consistent with the National Parks Act and Policy.¹⁴

¹³ Department of Indian and Northern Affairs, Parks Canada, Kluane National Park Planning Program (1977).

¹⁴ Ibid.

Since establishment of the park, "Interim Management Guidelines" were adopted in May 1975 and resource studies have been carried out. In the spring of 1976 an access study was completed. With this background information, Parks Canada began a comprehensive planning program to guide them in management of resources and uses of Kluane National Park. In 1977, Stage 1 of that program (information exchange) was completed; public meetings were held, information analyzed and four concept plans prepared for comment in 1978.¹⁵ This is Stage 2 of the comprehensive planning program (concept review). The four proposals range from a high level of wilderness preservation to the maximum development possible to provide visitors with opportunities to experience wilderness yet still preserve that wilderness. Stage 3 (plan review) will involve the development and review of a best plan or new plan (early 1979) to arrive at a final park management plan scheduled for late 1979.

Activities within the park relate to boating, fishing, mountaineering, camping and hiking. Kathleen Lake provides the major concentration of boating, fishing and camping; a semi-serviced campground is located there.

Issues raised in Stage 1 of the process, but outside of the terms of reference of the planning program, were related to mining (at the moment there is no mining activity in the park, although 38 claims under title to four registered owners exist), and cottaging (eight cottages exist on Kathleen Lake). Negotiations are continuing to acquire the rights to these properties.

Northern Yukon National Wilderness Park Proposal¹⁶

This proposed national park reserve encompasses the entire Firth River watershed, the Babbage River, the Old Crow Flats, the British Mountains,

¹⁵ Department of Indian and Northern Affairs, Parks Canada, Kluane Alternatives (1978).

¹⁶ Based on I.K. MacNeil, "Northern Yukon New Park Resource Analysis Report," (March 1977), and Minister of Indian Affairs and Northern Development, "Faulkner Announces Public Consultation for Six Arctic Wilderness Areas in National Parks System," Communiqué (January 23, 1978).

the Yukon coast, Herschel Island and a marine component in the Beaufort Sea. The western boundary would be the border with Alaska, making the proposed park contiguous with the Arctic National Wildlife Range in Alaska. The total proposed area would encompass about 21 238 km² (8,200 mi.²). The area under study includes more than half the total land area which Mr. Justice Berger recommended as a national wilderness park in his report of the Mackenzie Valley Pipeline Inquiry.

The proposed area, located above the Arctic Circle, is the only extensive non-glaciated landscape in Canada and provides an excellent representation of the region's natural heritage values. It is also an area of spectacular scenery and exceptional ecological significance.

This area is excellent wildlife habitat. Grizzly, black and polar bear are all found within the proposed park. The area is also considered to encompass some of the finest raptor (birds of prey) habitat in the Arctic. Wolves, moose and Dall sheep are also found in the area.

The Old Crow Flats, a level basin ringed by mountains and containing hundreds of lakes, is a major North American wildlife area, in addition to being an important migration route for the Porcupine herd of barren-ground caribou.

Each spring bowhead and beluga whales migrate into the Beaufort Sea from the North Pacific.

Herschel Island, off the coast, is of both natural and cultural significance.¹⁷

The area also has archaeological and palaeontological evidence of international significance. In 1976, an archaeological dig unearthed what is believed to be one of the oldest human remains discovered to date in the western hemisphere. Studies indicate that man was in this area more than 30,000 years ago.

17 There is also potential for a deepwater harbour on Herschel Island. A portion of the island has been reserved for that purpose in the Minister of DIAND's latest announced land freeze.

The area has been of considerable interest for some time and several proposals have been put forward for preservation of the area prior to its being slated for designation as a national wilderness park.

Included among these have been the proposed Canadian component of the Arctic International Wildlife Range and three proposed reserves of the International Biological Program. The National Museums of Canada have a large interest in terms of the area's cultural significance and the Yukon government has identified portions of the area as being of possible future interest to their parks program.

On January 23, 1978 the Minister of DIAND announced that Parks Canada would begin a period of public consultation regarding this proposed park and five other proposed parks in the north. The Minister announced he would be prepared to consider early withdrawal of land in any of the northern areas under study for proposed parks, including northern Yukon, but emphasized that any proposed reservation of lands for park purposes would not prejudice the outcome of native land claims.

On July 6, 1978 the Minister of DIAND announced a resource development freeze encompassing an area of approximately 38 850 km² (15,000 mi.²) in the northern Yukon.¹⁸ The area includes all land in Yukon north of the Porcupine and Bell rivers, excluding a small area around the community of Old Crow and a harbour site on Herschel Island. The withdrawal of land is seen as the first step in the creation of Canada's first wilderness park. This action halts further disposal of land for oil and gas exploitation and prohibits any further mineral staking. However, existing mineral claims and oil and gas interests are not affected by the withdrawal.

As mentioned in Chapter II, on July 14, 1978 COPE and the Minister of DIAND made public a joint position paper containing elements for settlement of the COPE land claim. Subsequently, on October 31, 1978 an agreement-in-principle, without any noticeable changes to the joint position

18 "Northern Yukon Set Aside for Caribou", Whitehorse Star, July 6, 1978.

paper, was signed. The agreement-in-principle provides that at least 12 950 km² (5,000 mi.²) of the Yukon north slope be set aside for a national wilderness park. The Inuvialuit will be guaranteed traditional hunting, fishing, and trapping rights in the park. They would also be allowed to establish small settlements at certain traditional coastal locations within the park and would be guaranteed certain economic opportunities related to park activities. The wilderness park would exclude up to 13 km² (5 mi.²) of land and adjacent offshore area for the purpose of a port in the vicinity of Pauline Cove on Herschel Island. An eight-member national wilderness park steering committee consisting of representatives of the Inuvialuit, other native people and the federal and Yukon governments is to be established. This committee will advise on the function and management of the proposed park. Further information on this proposed land claim settlement was provided in Chapter II.

Wild Rivers Survey

Parks Canada started a major survey of Canada's wild rivers in 1971. The survey, now complete, covered 16 093 km (10,000 mi.) along 65 rivers. Information on Yukon wild rivers surveyed (Yukon, Nisutlin, Teslin, Big Salmon, Ross, Pelly, MacMillan, White, Stewart, Sixty Mile, Klondike, Bell and Porcupine rivers) has been published.¹⁹

NATIONAL HISTORIC AREAS

The federal government has the authority to establish two types of historic areas - national historic parks and national historic sites. The main difference between national historic sites and national historic parks is that the sites lack one of the necessary conditions for a park (e.g. major historical significance or size), or may be a national historic park in the planning or development stage. All national historic areas are administered by the National Historic Parks

¹⁹ Department of Indian and Northern Affairs, Parks Canada, Wild Rivers: Yukon Territory (1976).

and Sites Branch of DIAND. There are no National Historic Parks in Yukon. The National Historic Sites consist of the riverboat S.S. Klondike in Whitehorse, and the various historical resources at Dawson associated with the Klondike gold rush, collectively known as the Klondike National Historic Sites.

NATIONAL HISTORIC SITES

The Minister of DIAND, under the Historic Sites and Monuments Act, has the authority to mark or commemorate national historic places; to make agreements with people for the care and preservation of such places; to establish historic museums; to acquire any historic places in Canada; and to provide for the administration, preservation, and maintenance of historic places or museums. This Act also established the Historic Sites and Monuments Board as an advisory body to the Minister. This body advises on the identification of persons, places and events of national historic significance.

Klondike National Historic Sites²⁰

In 1959 the Historic Sites and Monuments Board recommended that the gold fields and related features in the Dawson area were of national historic significance and that Dawson should be regarded as an historical complex of national importance and studied as such. Consequently, the National Historic Parks and Sites Branch of DIAND undertook a long-term study of the area. Over the past few years basic studies have been completed, some structures have been restored, buildings acquired and artifacts of the area collected and catalogued.

A planning program was begun by Parks Canada in September 1974, and an overall master plan proposal for preservation and commemoration of the Klondike National Historic Sites was adopted in principle by Parks Canada in May 1977.

20 Based on Department of Indian Affairs and Northern Development, Parks Canada, The Dawson Register: Information, Vol. 1 (March 1976); and Department of Indian and Northern Affairs, Parks Canada, Klondike National Historic Sites Master Plan Preview (1977).

The sites considered by the master plan were spread over an area of about 2 072 km² (800 mi.²), bounded by the Yukon River on the west, the Klondike River on the north, the Indian River on the south and Dominion Creek on the east. The historic sites considered vary in size, complexity and function but are grouped into the following categories: settlement sites, gold mining sites, engineering sites, supply and administrative sites.

Many of the proposals in the provisional master plan depend on joint action between Parks Canada, other government agencies, and the citizens of Dawson. On June 13, 1977, the minister of DIAND announced that the proposed master plan would result in a probable expenditure of \$20 million over a 25-year period.²¹

PARKS CANADA COOPERATIVE ACTIVITIES

Klondike Gold Rush International Historic Park

Progress has been made toward the formation of this park which would stretch some 2 575 km (1,600 mi.) from Seattle, Washington, to Dawson, Yukon. The park includes major interest areas: Vancouver, Victoria, Skagway, the Chilkoot Trail, Yukon River, Whitehorse, Dawson and the gold fields. The development of such a park is a cooperative effort of Parks Canada, the Yukon government the government of British Columbia, the United States Parks Service and the governments of the states of Alaska and Washington. A major step to making the park a reality was taken in 1977 when the British Columbia government passed the Klondike National Historic Park Act that authorized the government to enter into a federal-provincial agreement to establish such a park. The Canadian section of the park in British Columbia and at Dawson would come under Parks Canada management with acquisition costs, survey and master plan costs paid by the federal government.

21 Speech notes for the Honourable Warren Allmand, Minister of Indian and Northern Affairs, Announcement of Provisional Master Plan for Klondike Historic Sites at Dawson City, June 13, 1977.

AGREEMENTS FOR RECREATION AND CONSERVATION (ARC)

Study of Heritage Resources of the Yukon River

Parks Canada feels that areas of significant natural and/or cultural heritage can best be protected by cooperative action with other levels of government, private organizations and individuals, and by coordinating the actions of other federal departments. The combined objectives of the various participants can be met through joint agreement. This process has been termed Agreements for Recreation and Conservation (ARC).

The government of Yukon and Parks Canada are currently conducting preliminary field studies, under the ARC program, of historic and natural resources along the Yukon River system from Bennett, B.C., to the international boundary downstream of Dawson, Yukon. The river having served as the natural and historical connection between the Chilkoot Pass and Dawson, is an essential component of the Klondike Gold Rush International Historic Park.

During 1977 field investigations were carried out which resulted in groundwork for the preparation of a concept plan recognizing the river as an historic and recreational waterway.

Parks Canada and the Yukon Department of Renewable Resources have entered into a joint interim management and development program for the Yukon River.²² Interim management guidelines have been prepared for protection of the most significant historic resources until long-term planning has been completed and further development planning defined. These guidelines have been agreed to by the territorial and federal governments and will be in effect during 1979 and as they were in 1978.

²² Yukon government, "Heritage Resources on Yukon River to be Studied", News Release (September 21, 1977).

As a part of the initial program, two cooperative projects were carried out on the river during the summer of 1978. One project involved an eight-man crew which installed privies, cleaned up garbage, cleared brush and protected certain historic buildings. The second project involved employment of patrols between Whitehorse and Dawson to provide advice, emergency assistance and information to river travellers. The patrolmen also gathered information for planning purposes and ensured that historic buildings were not damaged and that artifacts were left in place.

These cooperative interim programs were implemented to minimize the impact of increased travel on the river during the period of concept plan preparation. The plan will have as its basis the conservation, protection and management of the recreational and heritage resources along the river.

During the planning process, public consultation will take place. A joint Parks Canada-Yukon government management board has been appointed to supervise and review the ongoing program.

COTTAGING

Land Disposition²³

The disposition of the vast majority of land for recreational residential purposes (cottaging) in Yukon is administered by DIAND. The land disposition policy was discussed in Chapter III. In summary, the federal government's policy is to make recreational cottage lots available by lease only in areas that have been designated for such purposes (approved subdivisions). This policy was announced by the Minister of DIAND, January 10, 1975. The reasons for this are to control haphazard development and conserve prime waterfront land.

23 Based on Department of Indian Affairs and Northern Development, "Land Administration Manual" Sections 304.1-304.7 and Minister of Indian Affairs and Northern Development, "New Leasing Procedures for Northern Cottage Lots Announced," (July 14, 1975).

The subdivisions are developed in consultation with the territorial government (through a subcommittee of the Federal-Territorial Lands Advisory Committee). In some areas public recreational areas may be developed adjacent to, and in conjunction with, cottage subdivisions to ensure optimum utilization of prime waterfront land.

As mentioned in Chapter III, under the cottage subdivision program, cottage subdivisions are being developed at selected lakes for disposal to the general public on a thirty-year lease basis; an initial three-year term followed by renewal up to 27 years. The renewal term depends on the lessee meeting all conditions of the lease agreement during the initial term, including the requirement to commence within one year, and complete within two years, the construction of a cottage of a specified value.

Initial lease rental fees are based on the development cost of the subdivision. The fees depend on lot size, location and degree of amenities provided, and are reviewed at five-year intervals. Only one leasehold lot per family household is permitted.

With regard to leases in older cottage subdivisions, where the lease contains an option to purchase, the lessee will be allowed to do so.

In the case of existing short-term leases, where these leases are consistent with objectives of the cottage subdivision program, they will be converted to long-term leases as they expire or become due for renewal. However, there is no intention to automatically convert all existing short-term leases to long-term ones. Where individual leaseholds do not conform to the cottage program policy objectives or do not conform to federal-territorial development plans, they are to be eventually phased out. The Regional Director, DIAND, Yukon, is responsible for establishing criteria for this phasing out, based on consultations with the territorial government.

Number and Location of Cottages

There is no precise figure available on the total number of cottages in Yukon. For 1971, Statistics Canada reports a total of 575 vacation homes for Yukon and Northwest Territories combined.²⁴ A "best estimate" of the total number of cottages in Yukon is about 618.²⁵ Most of the cottage lots are located on the lakes near Whitehorse - Lake Laberge, Marsh Lake, Tagish Lake and Teslin Lake. In addition, there is a well-established cottage development on Watson Lake.

Two new subdivisions have been surveyed and made available for lease - Teslin subdivision on Teslin Lake (53 surveyed lots) and Taku subdivision on Tagish Lake (71 surveyed lots).

Since 1975 no new cottage areas have been developed. Proposals since then have encountered conflicts associated with native land claims settlement and conflicts with other existing or potential resource uses. However, two new cottage areas are planned at the time of writing of this report. These subdivisions will provide about 140 additional lots at Marsh and Little Atlin lakes.

When an area has been chosen for a cottage subdivision, DIAND hires a consultant to carry out the site planning. Lots are then offered to interested persons who register with the Supervisor of Lands office in Whitehorse. The lots are disposed of on a lottery basis.

Ongoing Research Programs Related to Cottage Areas in Yukon

In 1977 and 1978, the Land Resources Division of DIAND funded studies related to identification of potential recreational cottage areas. The 1977 study focussed on an area within a 161 km (100 mi.) radius of

²⁴ Statistics Canada, 1971 Census of Canada, Housing, Household Facilities, Catalogue 93-737, Volume II, Part 4.

²⁵ This estimate is arrived at on the basis of the following information. As of December 1978 there were 682 active recreational residential leases and 7 agreements for sale in DIAND records. In addition to this, it is estimated there are 135 cottage lots held in title. The Supervisor of Lands, DIAND, Whitehorse, estimates that three-quarters of these lots might have cottages on them. The figure arrived at using this calculation is 618.

Whitehorse and primarily along existing road corridors. The study also examined the Ross River, Faro, Pelly Crossing, and Carmacks areas. In these latter areas the study was broadened at the request of the Yukon government to examine potential overnight camping sites. In 1978 a similar type of study was completed for three areas: the west Alaska Highway (Haines Junction to the Alaska border), the Mayo-Dawson area, and the Watson Lake area.

DIAND hopes to use information from this work, supplemented by information on access and user preference, to select areas for the development of future cottage subdivisions.

Commercial Cottage Operations Policy

Section 304.8 of the DIAND Land Administration Manual discusses the policy with respect to commercial cottage operations. This policy is summarized here. A commercial cottage operation requires either a territorial business licence, or approval in principle of the plans by the appropriate territorial government agency prior to approval of a lease. Subject to the foregoing and provided there are no land use conflicts involved and the applicant is not requesting lands in excess of reasonable needs, the application will normally be approved. Except in extraordinary circumstances the 30.5 m (100 ft.) setback from ordinary highwater mark of any watercourse or water body is observed.

OTHER STUDIES RELATED TO RECREATION

Yukon Tourism Strategy Study

This study was conducted during 1977 and 1978 for the territorial government. DIAND provided some financial input in order to obtain information on tourist lodges or integrated service centres (highway/commercial lodges). They were interested in obtaining information on whether there were any site specific areas in Yukon where such developments were possible. This study was completed in October 1978.

It provides a direction and framework for tourism development in Yukon for the next five to ten years.²⁶

COMMITTEE

Federal-Territorial Parks Committee

This committee was established in 1975 to discuss areas of mutual concern and issues related to the establishment of a territorial parks system. The first meeting of this committee was held January 15, 1975. It has not been a particularly active committee, having last met early in 1976.

LAND USE ISSUES

Issues associated with recreational land use in Yukon are:

- delays in meeting demands for cottage sites because of uncertainties with respect to a native land claim settlement and conflicts with other resource uses;
- increased development, increased population and increased access creates additional demands on the recreational resources of the territory;
- general lack of land use planning or planning programs and natural resource information on which to base decisions regarding administration and management of the land resource base;
- lack of legislation, policy, plans, funding and absence of a territorial parks system result in an ad hoc approach to providing recreational opportunities and recreational land use in Yukon.

²⁶ R.D. Graham, Yukon Tourism 1978 Industry Highlights, p. 9.

In an attempt to deal with some of these problems, DIAND has developed a cottage subdivision policy. In addition, DIAND has commissioned studies to identify potential cottage subdivision sites and has begun infilling in some cottage areas. DIAND has been working with the territorial government towards clarification of land status of campgrounds and picnic sites with a view towards eventual transfer of all of these to the territorial government to form part of a territorial park system. The territorial government has been developing a territorial parks ordinance and it is anticipated that it will be tabled in the legislature late in 1979.

IX. FISH AND WILDLIFE

In Yukon, the planning and management of fish and wildlife resources is shared between the federal and territorial governments. With regard to fish, full responsibility, except for the issuing of sport fishing licences, rests with the Fisheries and Marine Service of the federal Department of the Environment (DOE) under the Fisheries Act. The Wildlife Branch of the Yukon Department of Renewable Resources has responsibilities related to the enforcement of Yukon Territory Fishing Regulations made under the Fisheries Act. With respect to wildlife, the main responsibility rests with the Yukon Wildlife Branch under the territorial Game Ordinance. The Canadian Wildlife Service of the federal DOE has responsibilities under the Migratory Birds Convention Act and the Canada Wildlife Act.¹

In summary, fish and wildlife management in Yukon is pursuant to the following federal and territorial legislation:

Federal - the Fisheries Act;
 - the Migratory Birds Convention Act.

Territorial - the Game Ordinance;
 - the Fur Export Ordinance.

FISHERIES MANAGEMENT

The federal government has full legislative jurisdiction over the coastal and inland fisheries of Canada under the Fisheries Act. The territorial government issues sport fishing licences and conservation officers of the Wildlife Branch enforce the sport fishery regulations for non-anadromous fish. Resident and non-resident, native, and commercial fishing were discussed in Chapter II.

1 The Canadian Wildlife Service currently has no responsibilities in Yukon under the Canada Wildlife Act because there are no National Wildlife Areas in Yukon nor are there any existing cooperative agreements with the government of the Yukon Territory.

DEPARTMENT OF THE ENVIRONMENT (DOE)

Fisheries and Marine Service

The Fisheries and Marine Service is responsible for the administration and management of the sport and commercial fisheries of Yukon. The district office of this service, located in Whitehorse, handles virtually all aspects of fisheries related to land use. Regional staff from Vancouver are involved in large scale environmental impact assessment activities. It is estimated that, because of its dynamic nature, about 60% of the fishery officers' time is spent responding to activities related to land use issues, e.g. timber cutting, road and trail construction, placer mining operations, culvert installations.² The emphasis on fishery management in Yukon is in relation to anadromous fish, the service has a stocking program of about 100,000 fish per year.

DIAND POLICIES REGARDING LAND DISPOSITION FOR COMMERCIAL SPORTS FISHING AND FISH FARMING

Commercial Sports Fishing Operations

These operations are normally carried out at two locations. There is usually a main camp which provides lodging, meals and other amenities. The outpost camps are generally located on a lake accessible by aircraft. Section 304.8 of DIAND's Land Administration Manual outlines the policy with regard to these operations. The prospective lessee must obtain the required territorial business licences and building permits. As a general rule the water frontage of the main camp should not exceed 183 m (600 ft.) and for outpost camps this distance should not exceed 30.5 m (100 ft.).

² Personal communication, District Supervisor, Fisheries and Marine Service, Whitehorse, May 18, 1978.

Fish Farming

Section 304.22 of DIANDs Land Administration Manual outlines the policy with regard to these operations. Prospective lessees are required to obtain the necessary business licences from the territory and required clearances under the Fisheries Act before a lease will be granted. The lessee may be granted exclusive rights to stock the water body central to its operation. This excludes the granting of the bed of the water body.

WILDLIFE MANAGEMENT

WILDLIFE BRANCH, DEPARTMENT OF RENEWABLE RESOURCES

Section 16(q) of the Yukon Act gives the territory responsibility for enactment of ordinances related to the preservation of game. The Game Ordinance was enacted to fulfill this responsibility. That ordinance established the office of the Director of Game to administer the ordinance and the Wildlife Branch has been established under the director to carry out the administration and enforcement of the Game Ordinance.

The goal of the Wildlife Branch is: "To maintain Yukon wildlife populations at carrying capacity levels and species diversity for the benefit and enjoyment of present and future generations."³ The objectives of the Branch are as follows:

1. To manage game species to provide for their continued existence while allowing for harvest on the basis of maximum sustainable yield.
2. To manage and regulate the utilization of fur-bearing animals to aid the continued development of local trapping and fur industries.
3. To ensure the maintenance of all species of animals and birds in terms of the useful functions they serve in the balance of nature and to meet national and international responsibilities for rare or endangered species.

³ Government of the Yukon Territory, "Goals and Objectives of the Government of the Yukon Territory and Departments", Sessional Paper No. 2 (1976), pp. 11-12.

4. To engender in the public feelings of personal responsibility for the conservation of wildlife and an understanding of the basic principles of wildlife management.
5. To improve the performance, reputation and public image of field staff as local wildlife authorities in addition to their roles in enforcement and administration of regulations.
6. To establish and maintain a high level of performance of technical staff to ensure a capability for complete autonomy for the Yukon in the field of wildlife management.
7. To support and promote basic scientific research to contribute to biological knowledge about Yukon wildlife resources.
8. To introduce new animals into ecological niches not presently occupied by indigenous species and to re-introduce game animals into depleted areas to ensure species diversity and to add to present big game fauna.
9. To maintain a reasonable compromise between the game harvest by resident versus non-resident hunters to provide for optimum benefits for local hunters and the maintenance of the guiding industry.
10. To maintain and improve co-operation with federal government departments to ensure input into habitat manipulation in areas where the federal government has jurisdiction and to ensure consideration of wildlife management requirements in questions of land use.
11. To support the establishment of wildlife resource based local secondary industries particularly where they would provide employment of native people.
12. To enforce and administer the ordinances and regulations for which the Branch is responsible.
13. To ensure public participation which reflects the wishes of both consumptive and non-consumptive users of wildlife resources regarding proposed changes to legislation, regulations and policies.⁴

The branch has its main office located in Whitehorse, with field offices at Watson Lake, Haines Junction, Mayo, Ross River and Dawson. During the summer a temporary crew is located at Old Crow and does enforcement patrols in northern Yukon.

⁴ Ibid.

DEPARTMENT OF THE ENVIRONMENT (DOE)

Canadian Wildlife Service

The Canadian Wildlife Service conducts research, management and administration of migratory birds under the Migratory Birds Convention Act. In cooperation with the Yukon Wildlife Branch it undertakes joint programs of research, management and interpretation related to wildlife other than migratory birds.

A representative of the Service also serves as an advisor on wildlife matters in this capacity as a member of the Land Use Advisory Committee.

GAME SANCTUARIES AND PRESERVES

These areas, designated under the Game Ordinance, relate to prohibition of hunting within their boundaries. In Yukon there are two game sanctuaries (McArthur and Kluane) and two preserves (Peel River and Fishing Branch River) totalling about 11 267 km² (4,350 mi.²).⁵ The Peel River Preserve extends across the border into the northwest territories.

These sanctuaries and preserves are designations which relate solely to the prohibition of hunting. Other activities, such as mineral prospecting and placer mining, may take place within their boundaries.

The difference between a sanctuary and a preserve is that a sanctuary offers a higher level of protection. For example, Section 82(2) of the Game Ordinance indicates that Indians and Eskimos may hunt game within boundaries of a game preserve; whereas within a game sanctuary no person may hunt within its boundaries (Game Ordinance, S. 83(2)).

There are no federal waterfowl sanctuaries or national wildlife areas in Yukon.

⁵ Yukon Wildlife Branch, Alaska Highway Gas Pipeline Project: Environmental Concerns and Recommendations of the Yukon Wildlife Branch (July 7, 1977), p. 118.

HUNTING AND GUIDING, AND TRAPPING

These aspects of wildlife use and importance to Yukon's economy were discussed in Chapter II. The reader is referred to that chapter for a detailed discussion.

WILDLIFE MANAGEMENT

Yukon is divided into eleven game management zones. This allows the Wildlife Branch to establish differing open seasons and bag limits for game in the various zones, depending on abundance of game and hunting pressure on a particular area.

In 1975, Yukon's big game population was estimated to be 30,000-35,000 moose, 120,000 barren-ground caribou, 10,000-20,000 mountain caribou, 8,500 Dall sheep, 4,000 stone sheep, 1,500 mountain goat and 5,000 grizzly bear.⁶

The government of Yukon has no direct responsibility with respect to the land base and its management for wildlife purposes, except on Commissioner's lands. However, the Wildlife Branch has suggested that a system of block land transfers be made by the federal government to the territory. This would give the management and authority of critical wildlife areas to the Wildlife Branch.⁷

The Wildlife Branch has 20 areas in its files which it recommends for protection from other land use activities.⁸

Members of the Wildlife Branch serve as advisors on wildlife matters on the two most significant committees related to land and land use in the

⁶ Hoefs, "The Yukon's Wildlife Resources", p. 102.

⁷ Yukon Wildlife Branch, Alaska Highway Gas Pipeline Project: Environmental Concerns and Recommendations of the Yukon Wildlife Branch, p. 121.

⁸ Ibid.

territory: the Federal-Territorial Lands Advisory Committee and the Land Use Advisory Committee, also a federal-territorial committee.

Wildlife Branch Programs

The Wildlife Branch recently initiated programs to: (a) computerize fur harvest statistics, (b) map critical wildlife areas, and (c) carry out biological reconnaissance of important river valleys that have hydro-electric power potential. Big game inventory work continued. The Branch also reviewed impact statements and prepared responses on the Shakwak project, the proposed Alaska Highway natural gas pipeline, and provided advice on terms and conditions for environmental and socio-economic aspects of the latter. The Branch is presently evolving a trapline allocation policy, problem wildlife policy, and a policy regarding disposal of garbage as it relates to wildlife. In addition, the Game Ordinance is being reviewed in two stages: (1) incorporation of more urgently required changes into the ordinance over the next several months, and (2) a major rewriting of the ordinance over the next three years.

Canadian Wildlife Service Programs

Canadian Wildlife Service staff have carried out investigations of wildlife and wildlife habitat in northern Yukon. They have reviewed environmental impact statements and prepared responses on the Shakwak project and the proposed Alaska Highway natural gas pipeline. Migratory bird investigations are being carried out within this proposed pipeline corridor. A reconnaissance of waterfowl habitat along the Alaska Highway from Watson Lake to Haines Junction was conducted for DPW. Biological studies of the Porcupine herd of caribou in northern Yukon are currently in the planning stage.

WILDLIFE POLICIES AND PROGRAMS

Remote Camp Policy

The Yukon Wildlife Branch has developed this policy with regard to the siting and operation of camps (construction, exploration, etc.) in remote areas. The policy outlines suggested measures for firearms control, alleviation of bear problems, operation of aircraft and other machinery, feeding of wildlife and location of camps in relation to sensitive wildlife habitat.

Porcupine Caribou Herd

The Porcupine herd or barren-ground caribou is considered to be the most important renewable resource of northern Yukon. The herd ranges over an area of 250 000 km² (96,525 mi.²) from the Ogilvie Mountains in central Yukon, north to the Arctic coast, west into northeastern Alaska and east as far as the western foothills of the Mackenzie Delta. In 1977 the herd was estimated at 105,000 animals. The herd serves as an important food source for native people. Concern has been raised about the effect of ongoing and proposed construction projects on the herd (e.g. Dempster Highway, proposed Dempster natural gas pipeline).⁹

Talks have been held between officials of the Yukon and Northwest Territories governments and officials of the Canadian Wildlife Service regarding a proposed management plan for the Dempster Highway (further detail on this proposed management plan is provided in Chapter XI, Transportation).

The withdrawal of land in northern Yukon from further development, which was announced by the Minister of DIAND, July 6, 1978, is seen as an initial step in the protection of the Porcupine herd. It includes the herds' calving grounds as well as part of their summer and fall range,

⁹ Alaska Highway Pipeline Panel, The Porcupine Caribou Herd and the Dempster Corridor (1978).

but excludes their winter range, some of which is located south of the Porcupine River. The Minister of DIAND also announced the establishment of a task force to develop a management plan for the entire herd range.¹⁰ Representatives of the Yukon and Northwest Territories governments, federal government, the Council for Yukon Indians (CYI) and the Committee for Original Peoples' Entitlement (COPE) have been invited to develop the management plan. At the same time, the federal Minister of the Environment announced that discussions would be held between the Canadian Wildlife Service and the U.S. Department of the Interior in an effort to seek an agreement to protect the herd.¹¹

The Porcupine Caribou Committee, an international group of caribou experts, has also proposed the establishment of an international agreement between Canada and the United States to protect and manage the herd and conserve its range. This committee is composed of representatives of the Alaska Fish and Game Department, the U.S. Fish and Wildlife Service, the Alaska Co-operative Wildlife Research Unit, the Canadian Wildlife Service, the Northwest Territories Fish and Game Service and the Yukon Wildlife Branch.¹²

LAND USE ISSUES

Issues associated with fish and wildlife land use are:

- effects of development on fish and wildlife resources;
- spin-off effects of major projects on the fish and wildlife resources (e.g. hydro-electric developments, mines, increased population, increased fishing and hunting pressures on the resources);

¹⁰ "Northern Yukon Set Aside for Caribou", Whitehorse Star, July 6, 1978.

¹¹ Ibid.

¹² "Caribou Committee Wants Dempster Closed During Spring, Fall Migrations", Whitehorse Star, May 15, 1978.

- conflicts between resource use (e.g. recreation, forestry, wildlife, fishing);
- lack of baseline data on the renewable resource base.

In an attempt to provide more information on the effects of developments on the fish and wildlife resources, and to assemble more information on these resources, the Yukon Wildlife Branch, Canadian Wildlife Service, and Fisheries and Marine Service have been carrying out additional studies. Many of these studies have been oriented to the possible effects of specific projects on these resources, e.g. Alaska Highway natural gas pipeline, while others are of a long-term nature; the results will not be available for a few years.

X. ENERGY RESOURCES, MINING AND QUARRYING

All aspects of oil and gas operations in Yukon, including disposition of subsurface rights to land for such purposes, are administered by DIAND under regulations made pursuant to the Territorial Lands Act and the Public Lands Grants Act. Mining rights in Yukon are also administered solely by DIAND under two federal acts (Yukon Quartz Mining Act and Yukon Placer Mining Act) and two sets of regulations pursuant to the Territorial Lands Act (Territorial Dredging Regulations and Territorial Coal Regulations). The only area of mining which the territorial government administers and controls on land under its jurisdiction is with respect to quarrying (disposal of land rights for taking sand, gravel, stone, loam, etc.). The Territorial Financial Administration Ordinance outlines the form and cost for obtaining a quarrying permit on Commissioner's lands. The Department of Local Government has responsibility for management and control of pits and quarries on Commissioner's lands. Responsibility for quarrying on territorial land remains with DIAND and is managed as a surface right under the Quarrying Regulations which have been issued pursuant to the Territorial Lands Act.

The subsurface disposition of all lands in Yukon is dealt with under the following legislation:

Oil and Gas

Under the Territorial Lands Act and Public Lands Grants Act the following regulations are relevant:

- Canada Oil and Gas Land Regulations (disposal of rights to search for and take oil and gas from Canada lands, for the control of oil and gas exploration activities, for payment to the federal Crown of fees, rentals, royalties and related revenues);

- Canada Oil and Gas Drilling and Production Regulations (control of drilling and production operations, prevention of pollution, and safety of personnel directly involved with well-site operations).

A related piece of legislation, which applies more to the safety aspects of oil and gas operations, is the Oil and Gas Production and Conservation Act (provides broad authority for control of all activities associated with drilling, production, conservation and transportation of oil and gas in Canada lands in the territories and offshore areas under Canada's jurisdiction).

Mining

- Yukon Quartz Mining Act ("quartz mining", "hardrock mining" or mining of rock in-place);
- Yukon Placer Mining Act (mining of alluvial deposits, usually gold in or near creeks or rivers);

Under the Territorial Lands Act the following regulations apply:

- Territorial Dredging Regulations (governs disposition of rights to dredge submerged beds and bars of rivers for alluvial deposits, usually gold);
- Territorial Coal Regulations (governs disposition of rights to coal).

Quarrying

On territorial lands, under the Territorial Lands Act, the following regulations apply:

- Territorial Quarrying Regulations (deal with disposal of land rights for taking sand, gravel, stone, loam, etc.).

On Commissioner's lands under the Financial Administration Ordinance, Commissioner's Order 1971/416 sets out the fees and royalties for quarrying permits.

ADMINISTRATION OF OIL AND GAS, MINING AND QUARRYING RESOURCES IN
YUKON¹

The Northern Non-Renewable Resources Branch, Northern Affairs Program of DIAND, is responsible for the development of programs and policies relating to the management of subsurface rights in land (oil, gas and mineral resources).

The Yukon region, Northern Operations, DIAND, Whitehorse, is responsible for the operational aspects of these programs. However, with respect to oil and gas, except for inspectors in the field, all aspects of administration are managed out of headquarters in Ottawa-Hull.

The Oil and Gas Lands Division provides managerial services in respect of the government's proprietary interest in oil and gas. It is responsible for the conduct of sales of oil and gas rights, issuance of permits and leases, maintenance of a registry of oil and gas rights, surveillance of royalty, and other revenue functions resulting directly from oil and gas operations.

The Oil and Gas Resources Evaluation Division is responsible for the economic and geological appraisal of individual parcels, and the evaluation of oil and gas potential. It assesses exploratory programs for suitability to meet obligations to explore, receives and monitors technical data from exploratory programs, maintains a library of exploration reports, processes data to provide information on potential reserves and land values, and assists engineers of the Oil and Gas Engineering Division.

The Oil and Gas Engineering Division is responsible for DIAND's activities related to drilling control and production techniques to protect against blowouts. The division also ensures that recovery enhancement programs are carried out. Furthermore, it is responsible for pollution prevention and safety aspects at drill sites.

¹ Department of Indian Affairs and Northern Development.

With regard to mining, there is a Mining Division that is responsible for the administration of mining and mineral rights (excluding oil and gas, and quarrying) from the acquisition of a claim through to the production stage, including safety in mines. There are three sections in this division: mining lands, mining geology and mining engineering. The Chief of the Mining Division is responsible for overall operations.

Yukon is divided into four mining districts. A mining recording staff of the Mining Lands Section is responsible for the disposition of mineral rights within each district in accordance with the applicable legislation. In Yukon, mining recorders are located at Dawson, Mayo, Watson Lake and Whitehorse. A Supervising Mining Recorder is located at Whitehorse. His main function is to ensure that standard practices are used in administration of the various mining acts and regulations.

The Mining Engineering Section of the Mining Division is headed by the Chief Mining Engineer located in Ottawa-Hull. This section is responsible for the administration of appropriate safety legislation. The Regional Mining Engineer and his staff, located in Whitehorse, are responsible for the inspection of mines, quarries and blasting operations, to ensure compliance with safety regulations; inspection of mineral claims, to ensure compliance with Yukon Quartz Mining Act and Yukon Placer Mining Act; ensuring adequate safety training for mine personnel; and conducting ventilation and dirt surveys, monitoring radioactive contamination, and undertaking environmental studies of all underground and surface mining properties.

The Mining Geology Section provides geological information and advice to the mineral industry. A regional geologist, and a core library are located in Whitehorse. The regional geologist carries out mining property examinations, collects rocks and mineral specimens, and advises the mineral industry, government agencies and researchers on geological problems.

Mineral policies in the territories have been based on the old "free miner" tradition that public lands are free and open to mineral exploration and use for development.² The government plays a passive role in the development with the mining recorder operating like a land registry office, recording what is staked. The history and political significance of the mineral industry is reflected in the legislation; the Yukon Quartz Mining Act and Yukon Placer Mining Act are both excepted from provisions of the Territorial Lands Act.

Policies related to oil and gas exploration and development have their origin in early coal mining legislation, rather than in the quartz or placer mining legislation.³ The Crown plays a much more active role and controls much more closely the disposition of rights to oil and gas exploration. Rights to explore for and produce oil and gas may only be acquired by application or a competitive bidding process.

LEGISLATION RELATED TO ENERGY RESOURCES, MINING AND QUARRYING

OIL AND GAS ACTS AND REGULATIONS

CANADA OIL AND GAS LAND REGULATIONS⁴

The acquisition and utilization of territorial lands for the purposes of petroleum exploration and production is provided for under the Canada Oil and Gas Land Regulations, pursuant to the Territorial Lands Act.

² Beauchamp, Land Management in the Canadian North, pp. 20-21.

³ Ibid., p. 25.

⁴ Based on Naysmith, Land Use and Public Policy in Canada, pp. 67-71; Beauchamp, Land Management in the Canadian North, pp. 25-27; Department of Indian and Northern Affairs, Oil and Gas Resources in the Yukon Territory, pp. 31-34; Department of Indian Affairs and Northern Development, 1976-1977 Government Activities in the North, pp. 100-101; and Department of Indian and Northern Affairs, Procedures, Licensing, Legislation & All That, pp. 18-20.

The Regulations provide that land may be held either in permit or lease form. Permits are held in the exploratory stage and provide the permittee with the exclusive option to obtain leases on the permit lands at a later date. The lease provides the right to search for, win and take, oil and gas and must be converted from the permit subsequent to the discovery of oil and gas, in order to allow for development and exploitation. Land that is potentially valuable may be converted to lease upon discovery of oil and gas or where the normal term of the permit (varying from nine to twelve years) has lapsed.

Territorial lands are divided into grid areas (and further subdivided into sections and units) on the basis of legal surveys, for purposes of disposing of lands for petroleum operations. Until the regulations were amended in 1977, exploratory rights to available grid areas were granted as permits upon application and a fee of \$250 per permit, and a deposit of money, bonds, or promissory notes as a guarantee that minimum exploratory expenditures would be carried out. A grid area varies according to latitude but averages 20 235 ha (50,000 a.) in Yukon.

The original permit term is three years south of latitude 65° north, four years between 65° north and 68° north, and six years north of 70° north. All permittees are entitled to six one-year renewals, allowing for a permit life of nine to twelve years. At his discretion, the Minister of DIAND may extend the normal terms by special renewals. There are still a number of permits whose terms have not expired. Most of the permits will expire in 1980, 1981, or 1982. A 1977 amendment to the regulations (SOR/77-666) provides for an "exploratory agreement". This is an agreement between the explorer and the government to carry out exploration work on the lands specifically described in the agreement. This has replaced the permit system. The duration and other conditions of the agreement are negotiated. All exploration is subject to the requirements of the Territorial Lands Act and the Arctic Waters Pollution Prevention Act. The holder of an exploration agreement cannot produce and sell oil or gas, but has the option to acquire an oil and gas lease.

Another exploration grant similar to the exploration agreement is the "special renewal permit". The term of this permit may be up to 10 years and may only be renewed for the difference between the initial period and 10 years. The minimum work requirement for this permit is an exploration program of \$1.50 to \$10.00 per acre, depending on the age of the permit. This permit may be granted only to holders of existing exploration rights. The holder of this permit may not produce and sell oil or gas, but has the right to acquire an oil and gas lease.

Section 24 of the Regulations also provides for the issuance of an exploratory licence. This pertains to no specific area. It gives the licensee the right to enter vacant lands to search for oil and gas but does not provide him with an exclusive option to acquire exploratory or production rights.

Section 49(1) of the Regulations allows a permittee to apply to group permit areas not exceeding 1 011 750 ha (2,500,000 a.) provided the parts are contiguous or within a circle having a radius of 161 km (100 mi.). This allows for expenditures made on any permit area in the group to be applied to any or all of the permit areas (S.50(1)). Permittees are also permitted regrouping (S.51).

The holder of a permit has an exclusive option to acquire leases for a 21-year original term on up to one-half of the permit area for oil and gas development. The leases must be at least one section in area, but no larger than six sections by three sections. A section is an area of roughly 2.59 km² (1 mi.²) and has one dimension equal to one minute latitude and the other dimension equal to a fraction of a grid area boundary (see previous discussion on division of territorial lands into grid areas). Although it was originally intended that the half permit not taken under lease would be surrendered to become Crown Reserve for subsequent disposal, the concept of unitary development of a permit area has been preserved through orders made under the Regulations and is contained in the present regulations and proposed legislation.

An oil and gas lease can be issued to any Canadian or any Canadian corporation in which Canadians have the opportunity of participating in ownership and financing. The oil and gas lease gives the lessee the right to produce and sell oil and gas, as well as doing further exploration work. The lease requires the producer to pay a royalty on all production of 10% or a rental of \$1 per acre if the lease does not produce. Rather than applying for a lease, a person may apply for a "special permit" discussed previously.

A lessee who holds an exploratory licence may carry out exploratory work, drill wells, and produce any oil or gas from the land within his lease area. If commercial production begins during the term of the lease, the Minister shall, if requested by the permittee, reissue the lease for a term of 21 years.

Where the surface rights to any part of the lands under an oil and gas lease have been disposed of in the form of a terminable grant (e.g. timber licence, grazing lease, coal mining lease, mining claim), granted under letters patent, or sold under an agreement for sale, the permittee or licensee cannot enter these lands without the consent of the holder of the surface rights, or the holder of the lease or licence, and consent of the occupier of the land, or an order for entry from an arbitrator. Under the Regulations, the arbitrator would be the local magistrate in the district.

All oil and gas leases and exploratory permits which are terminated, become a part of the Crown Reserve and may be disposed of at public sale through call for tenders. Depending on the circumstances, tenders may be either in the form of cash bonus or a bonus of exploratory work to be performed during the original term of the permit. If no tenders are submitted, the land may be open for filing.

BILL C-20 PROPOSED CANADA OIL AND GAS ACT

A policy statement was issued in May 1976⁵ and supplemented by a ministerial speech of June 20, 1977. This was followed by the introduction of Bill C-20.

This bill was given first reading by parliament on December 20, 1977. The proposed legislation would replace the Canada Oil and Gas Land Regulations and retain those features of the regulations not inconsistent with the new legislation.

The proposed Act sets out new oil and gas land management rules. The old free entry system is to be replaced by a bidding procedure. There would be two stages in the new system: exploration agreement (issued for 10 years, subject to renewal of up to 10 years), and production licence. As a transitional measure, holders of most existing permits and leases would be allowed to proceed to a provisional lease on their entire permit acreage. The Crown corporation, Petro-Canada, is given certain acquisition privileges. There is an increase in rental and royalty rates. In addition, a progressive incremental royalty would be levied on production revenues after certain specified deductions. A three-year progressive incremental royalty "holiday" would be provided on all discoveries made prior to October 31, 1982.⁶

Under Bill C-20, leases would cease to exist, with the eventual replacement of special renewal permits and leases by a production licence. The exploration agreement would be replaced by a production licence. The production licence would be issued for 10 years, subject to further 10-year renewals. This would replace the existing 21-year lease.

5 Department of Energy, Mines and Resources and Indian and Northern Affairs, Statement of Policy: Proposed Petroleum and Natural Gas Act and New Canada Oil and Gas Land Regulations (May 1976).

6 A.R. Lucas and E.B. Peterson, "Northern Land Use Law and Policy Development: 1972-78 and the Future," p. 69.

Under the present Canada Oil and Gas Land Regulations, an exploration licence is required to carry out exploration work on unoccupied Crown land north of 60°. This would be modified in Bill C-20 to become an operating licence. It would be similar to the existing exploration licence but with more restrictions. A similar system of grouping would carry forward into the proposed new Act.

It is felt by some that the combination of the operating licence and land use permit system will allow DIAND greater control over operations, and allow for minimization of adverse environmental effects of oil and gas operations.

Section 19 of Bill C-20 would establish an "Environmental Studies Revolving Fund". This section would allow the establishment of two such funds, one under the administrative responsibility of the Minister of EMR (for Canada lands under his jurisdiction) and one under the administrative responsibility of DIAND. The total of each fund would be a maximum of \$15 million. Payments would be made by any person holding an interest or right under the proposed Act or former Regulations, or after the Act came into force, anyone entering into an exploration agreement under the Act. Payments from the fund would be made: "...to such environmental studies of Canada lands as he determines to be necessary in order to decide whether or not to grant or issue interests or rights in respect of oil or gas or authorize exploration for oil or gas."⁷

It is expected that there is likely to be a considerable amount of opposition to this particular aspect of the bill by those involved in oil and gas exploration and production. Therefore changes are almost certain to be made to this section before it becomes law.

This bill did not become law in 1978. It has not yet been reintroduced in Parliament.

OTHER LEGISLATION RELATED TO OIL AND GAS

Two other pieces of legislation, the Canada Oil and Gas Drilling and Production Regulations issued pursuant to the Territorial Lands Act and

⁷ Bill C-20 proposed Canada Oil and Gas Act, S.19(4).

Public Lands Grants Act, and the Oil and Gas Production and Conservation Act, relate more to drilling and production operations, and safety of drilling operations; consequently they will not be discussed here.

STATUS OF OIL AND GAS EXPLORATION AND DEVELOPMENT IN YUKON

It is estimated that about 10% of Yukon is considered to be prime oil and gas exploration land.⁸ The two main land areas for potential oil and gas fields are in northern Yukon, roughly north of 65° (Eagle Plain and Old Crow Basin), and in the extreme southeast corner of Yukon, adjacent to the British Columbia-Northwest Territories borders. In addition, there are prospects off the north coast in the Beaufort Sea.

As of December 31, 1978, in Yukon there were a total of 136 permits covering an area of 2 114 346 ha (5,224,478 a.) and 142 leases covering an area of 211 769 ha (523,275 a.) in effect. During the period 1972-1977, no new leases were issued. However, since the 1977 amendments, leases have been issued to holders of existing permits. In southern Yukon (south of 65°) all permits have expired; they were initially issued for nine years. In northern Yukon (north of 65°) permits were issued for 10 or 12 years (10 years between 65° and 68°; 12 years north of 68°). On the north coast of Yukon, renewal of some permits has been granted until 1981. The permits that expired in the 1972-77 period had an option under the Canada Oil and Gas Land Regulations to acquire a special renewal permit or accept leases. The bulk of the permittees chose to accept leases.⁹

Exploration work in northern Yukon (north of 65°) has been more or less dormant since 1972 with one company doing some drilling in the winter of 1977-78 at 66°N. There is a moratorium on exploration work in the Old Crow Flats area.

⁸ Department of Indian and Northern Affairs, Oil and Gas Resources in the Yukon Territory, p. 1.

⁹ Personal communication, Chief, Oil and Gas Lands Division, DIAND, Ottawa-Hull, June 12, 1978.

With regard to expenditures on exploration work, north of 65°, \$123 million has been spent, \$23 million of this was spent north of the Porcupine River.¹⁰

MINING ACTS AND REGULATIONS

YUKON QUARTZ MINING ACT¹¹

This Act governs mining activity for minerals which includes all rock in situ containing gold, silver and any other naturally occurring element, but excludes coal, gravel, soil, peat, limestone, oil or other related hydrocarbons.

Three steps are involved in exploring for and eventually mining minerals: prospecting (searching for minerals), claiming (staking and recording a promising area), and leasing (exclusive rights to explore and develop a mine).

Under the Yukon Quartz Mining Act anyone over 18 years of age may enter upon any vacant land in the territory to prospect (S.12(1)). During a 12-month period, that person is allowed to locate up to eight mineral claims (S.12(2)). The maximum size of a claim allowed is 457.2 m by 457.2 m (1,500 ft. by 1,500 ft.) or 29.9 ha (51.65 a.) (S.15(1)). Section 17 (1) of the Act indicates that the Minister of DIAND may grant up to 64.75 ha (160 a.) for the mining of iron and mica.

Section 13(1) of the Act provides certain restrictions with regard to land that may be entered for prospecting; such restrictions include: "...any land occupied by any building, and any land falling within the curtilage [that area fenced in around one's home] of any dwelling-house, and any land valuable for water-power purposes, or for the time being

10 Ibid.

11 Based on Beauchamp, Land Management in the Canadian North, pp. 20-25; Department of Indian and Northern Affairs, Procedures, Licensing, Legislation & All That, pp. 16-18; and Yukon Quartz Mining Act, R.S.C. 1970, c. Y-4.

actually under cultivation unless with the written consent of the owner, lessee or locatee or of the person in whom the legal estate therein is vested...". In addition, this same section prohibits prospecting on any lands occupied by a church or cemetery, areas covered by existing permits or claims, Indian reserves, national parks and national defence lands or other similar reservations made by the federal government.

Under the Act, a prospector is not allowed to enter upon lands owned or lawfully occupied by another until he has given adequate security, to the satisfaction of the mining recorder, for damage or loss that may be caused and shall make full compensation for damage if ordered to do so (S.14).

After locating a claim, a prospector stakes the area by erecting two legal posts as specified in the legislation, and he must record it with the mining recorder of the district, within which it is located, within a specified period of time or it will have been deemed to have been abandoned and forfeited to the Crown (S.38). A recorded holder is allowed to hold his claim for one year and subsequently from year to year, provided that \$100 worth of miner-like work is done each year and recorded at the office of the mining recorder for the district in which the claim is recorded (S.53). When a certain amount of work has been done on the claim, the holder is entitled to receive a "certificate of improvements" and he is then entitled to a lease upon payment of a fee and rental (S.64). A recorder holder may make a payment of \$500 (\$1,000 in the case of an iron or mica claim) in place of work done (S.63).

A maximum of 16 adjoining claims may be grouped before a lease is applied for in order to allow the representation work done on any one claim to cover the requirements of the group.

Mineral claims may also be leased after meeting the development and survey requirements. The initial period of such a lease is for 21 years, renewable for further 21-year periods if DIAND is satisfied that the lessee complied with all terms of the initial lease (S.96).

The lease amount is \$50 for the first 20.9 ha (51.65 a.) plus \$5 per acre over that size. Renewals are \$200 per 20.9 ha (51.65 a.) plus \$20 per acre over that size. Renewals are \$200 per 20.9 ha (51.65 a.) plus \$20 per acre over that size. The rate with respect to iron and mica leases is \$150 per initial claim and \$600 for each 21-year renewal.

The mineral claim or lease does not convey any right or claim to the surface lands on vacant land other than to occupy it as necessary for exploring, developing, and operating the claim (S.72(1)). However, the claimant or lessee may apply to lease the surface rights at a rental of \$1 per acre per year (S.72(3)). The term of such a lease shall not exceed the term of the minerals lease and is appurtenant to such a grant (S.72(4)).

Section 72(1) of the Act allows the holder of a mineral claim to use, free of charge, such timber on the claim as is necessary for working the claim. A timber agent may permit anyone else to cut timber on the lessee's claim for use in mining purposes where none is available within a reasonable distance of his claim (S.72(2)). However, where a mineral lease is lawfully on land occupied under a timber licence, the lease expressly reserves the timber (S.75).

Where a lease of a mineral claim is located on lands, the surface rights of which have been disposed, (e.g. timber licence, petroleum, grazing or coal mining lease), the mineral lessee must obtain the permission of the Minister of DIAND before entering the land (S.100). In cases where the surface rights have been patented and the mineral lessee is not able to make an arrangement with the surface owner, he can ask for arbitration (S.101).

Sections 117 and 118 of the Act allow the Minister of DIAND to grant a lease of up to 2 ha (5 a.) of land for a millsite for a term to be decided by him at an annual rental of \$1 per acre per annum. Land which could be of value for water-power purposes or commercial mining shall not be used for this purpose. If the mill site is not used within three years from the date of the lease, it is subject to cancellation (S.119).

Section 121 of the Act, related to water rights, ceased to be in force by declaration of water management areas under Section 39 of the Northern Inland Waters Act.

YUKON PLACER MINING ACT¹²

This Act governs placer mining, which is the process of mining metal-bearing alluvial deposits by washing them with water. In Yukon, gold is the metal usually washed out. Placer mines operate only during the summer and vary in size from larger, long-term operations to one-family operations. The methods of operation also vary with the size. A small operation may be a sluice box. This is a long trough with riffles in the bottom. Gold-bearing gravel is dumped into this trough and water from a nearby creek is used to wash the gravel. Heavier, fine particles of gold are trapped in the riffles of the sluice box while the lighter, larger gravel is washed away. In frozen ground it is most easily mined hydraulically. This involves use of high pressure pumps to direct a jet of water against the bank of a stream. This tends to break down the frozen deposits and free the gravel.¹³

The types of land which may be used for placer mining and the restrictions regarding entry on occupied lands, are similar to those discussed under the Yukon Quartz Mining Act. Anyone over 18 may prospect and mine on territorial lands subject to certain limitations outlined in the Act.

A placer mining claim may be up to 152.4 m (500 ft.) in length, measured along the baseline of the creek or established by a government survey, and up to 304.8 m (1,000 ft.) on either side of the baseline and

12 Based on William MacLeod, Water Management in the Canadian North: The Administration of Inland Waters North of 60° (1977), pp. 66-69; Beauchamp, Land Management in the Canadian North, pp. 24-25; and Yukon Placer Mining Act R.S.C. 1970, c. Y-3.

13 MacLeod, Water Management in the Canadian North: The Administration of Inland Waters North of 60°, p. 67.

parallel to it (S.19(1) and (2)). The total tract is, therefore, 152.4 m (500 ft.) by 609.6 m (2,000 ft.). If the claim is not situated on a creek, the maximum size is 152.4 m (500 ft.) by 304.8 m (1,000 ft.) (S.20).

As is the case in the Yukon Quartz Mining Act, the prospector, after locating a claim and staking the area, must record it within a specified period of time with the mining recorder of the district within which it is located (S.27).

A person locating a placer claim may obtain a grant of one to five years on payment of \$10 for each year of the grant. This grant gives an exclusive right to work the claim for the stipulated period with an absolute right of renewal from year to year afterwards, subject to the payment of a fee and \$200 worth of work due on the claim each year (S.40(1) and (2)). Claims may also be sold, mortgaged or otherwise disposed of if the mining recorder is provided with a copy of the disposal instrument (S.45(1)).

Grouping is also allowed in the Act. A maximum of 10 adjoining claims may be grouped together for purposes of working the claim (S.51(1)).

Section 47 (1) of the Act allows every person with a grant or claim, or permission to record a claim, to cut timber for his own use and construct a residence on his claim under this section. The mining recorder may also allow the holders of other claims rights to enter onto another's claim if necessary for working of their claims, and may grant permits to other claim owners to cut timber for their own use.

The Act also provides a lease to prospect for larger areas. In order to do this, application is made to the Commissioner. The lease term is one year, renewable for two additional periods of one year each, provided that the necessary work (\$1,000 of approved prospecting work on each 1.6 km (1 mi.) leased) has been done in each area (S.91).

At the end of any one of the three years, all or part of the area may be staked into claims. In the instance where the area is a creek which has been previously recorded and abandoned, the size of a leased tract is 8 km (5 mi.) along the baseline and 304.8 m (1,000 ft.) on each side. Where it is a river, or where the claim is not fronting either a creek or river, the claim is as described above but for one side only. The rental rate is \$25 per mile or fraction thereof. Where the lease is for an area not previously worked or recorded, the term is one year only, not subject to renewal, and only 1.6 km (1 mi.) in length. The lessee cannot assign these rights without the consent of the Minister (S.91).

In addition to restrictions to enter land for placer mining which are similar to those outlined in the Yukon Quartz Mining Act, the Yukon Placer Mining Act has an additional section allowing the Governor-in-Council to prohibit entry on lands for placer mining where it is felt that they may be required for a harbour, airfield, road, bridge or other public work or for a national park, historic site, townsite or other public purpose. Entry to such lands may be allowed under specified terms and conditions (S.92).

Sections 54 to 69 of the Act ceased to be in force with the establishment of water management areas under Section 39 of the Northern Inland Waters Act. In essence, this has resulted in placer miners being allowed to continue their operations much as before in traditional creeks. All new operations were to require settling facilities and all operations were to provide them by 1976, with the exception of those approved by the Water Board. All placer mining operations in Yukon are now authorized pursuant to Section 11(b) of the Regulations under the Northern Inland Waters Act which allows uses for a period of up to 270 days.¹⁴

¹⁴ MacLeod Water Management in the Canadian North: The Administration of Inland Waters North of 60° p. 68. Further information on the Northern Inland Waters Regulations is provided in Chapter XII.

TERRITORIAL COAL REGULATIONS¹⁵

These Regulations have been made pursuant to the Territorial Lands Act and govern the disposition of rights to coal on territorial lands.

As with other mining legislation, any person over 18, or a corporation, may stake out a coal location as a prerequisite to applying for a coal lease or permit. However, the following lands are not available for staking: land used as a cemetery; within the limits of a municipal district, municipality, or a local improvement district; land reserved for an Indian reserve, national park or game sanctuary, or for military or other public purpose; land reserved under the Dominion Water Power Act; or land lawfully occupied for mining purposes (S.5(2)). Where the surface rights of any land are owned or lawfully occupied by another, a person cannot stake an area until he has the consent of the owner or occupant, or has made a security deposit with the local mining recorder. Compensation must be made for any loss or damage to an owner or occupant caused by a person staking on this basis (S.6(1) and (2)).

The maximum area which may be staked is 259 ha (640 a.) in the instance where the developer intends to apply for a lease, or 0.4 ha (1 a.) where he intends to apply for a permit (S.7(2)).

When an area has been staked, a lease may be applied for by paying a \$5 fee, submitting a sketch of the location and paying the rental for the first year of the lease (\$1 per acre per year) (S.12 and 14(1)). A 21-year renewable lease may be obtained (S.14). In addition to the annual lease rental, a royalty of 10 cents per ton of marketable coal must be paid to the federal Crown (S.15).

A person may acquire a lease at one location only, although assignment, transfer and subletting is possible with the written permission of the Minister of DIAND (S.16 and 21(1)). The lessee must commence active

15 Based on Beauchamp, Land Management in the Canadian North, pp. 27-28; and Territorial Coal Regulations 1955 consolidation amended by SOR/65-368, SOR/65-471, SOR/67-586, SOR/77-769.

operations within one year of the date that he is notified by the Minister to do so, and must produce a quantity of coal from the site which is specified in the notification (S.20(1)). Failure to meet the above conditions may result in cancellation of the lease (S.20(3)). Section 18 of the Regulations entitles the lessee to the coal upon or in the land included in the lease, and allows him the right to enter upon, use and occupy the surface to the extent necessary for efficient coal mining purposes; however, the lessee must compensate the owner or lawful occupant of the surface rights for any loss or damage caused by coal mining operations on the leased area.

Where coal in lesser quantities, or for shorter periods of time is required, a permit may be applied for. The size of the permit area is not more than 0.4 ha (1 a.) (S.7(2)) and the permit expires on the following 31 March, although it may be renewed for the same period of time (S.26 and 27). The right to entry under a permit is the same as that for a lease, except that the permittee may only mine coal to the maximum amount specified in the permit (S.25). A permittee is allowed only one permit at a time (S.29). A federal government department; municipal district, local improvement district or a municipality; or an educational, religious or charitable institution can be issued a permit free of charge for authorization to mine up to 90 720 kg (200,00 lbs.) of coal for the applicant's own use without the payment of a royalty (S.24(2)). In isolated portions of the territories, Indians and Eskimos may, upon application for permission to do so to an agent of territorial lands or a R.C.M.P. officer, mine small quantities of coal free of charge without being required to make application under the provisions of the Regulations (S.34).

An alternative to staking is also allowed under the Regulations. A coal exploration licence may be issued for a three-year term for an area equal to one quarter of a claim sheet, approximately 129.5 km² (50 mi.²) (S.36 and 38). At the end of any one of the three years of the licence term, the licensee may stake one coal mining lease within the licence area and surrender the remainder of the area (S.41). The

licencee may also apply for a lease under Section 12 of the Regulations or a permit under Section 23 of the Regulations, at the end of any one of the three years of the licence term.

TERRITORIAL DREDGING REGULATIONS

These regulations pursuant to the Territorial Lands Act govern the disposition of rights to dredge for minerals in the submerged beds of rivers in the Territories. This dredging is normally for placer gold. These Regulations cover mainly submerged river beds of 45.72 m (150 ft.) wide, from natural bank to natural bank. If it is less than that, then the activity would be covered as a creek under the Yukon Placer Mining Act.

Any person may be issued a dredging lease upon application (S.3). The term of the lease is for 15 years, renewable if the lease terms are met (S.9). Terms of the lease include having a dredge in operation within three years of the lease being issued, and in every succeeding year dredging not less than 15 292 m³ (20,000 yd.³) of material (S.12). However, up to five adjoining lessees may work on one or more of their areas for a period of up to 10 years to satisfy the above condition (S.12(3)). Every lessee has the exclusive right to dredge the river bed within the length of river leased to him (S.6) and a lessee may have only one lease (S.7).

The application fee for a lease and for renewal is \$5. The rate of rental per mile for the first year is \$100 and \$10 per mile in subsequent years (S.13). In addition, the lessee is required to pay a royalty for minerals recovered. In Yukon, this royalty is calculated at the same rate as that paid on placer claims for gold, and 2.5% for all other minerals (S.14(1)(a) and (b)).

The lessee is not permitted to interfere with the right of the public to use the river for navigation or other purposes, and the free navigation of the river cannot be impeded by deposit of tailings and the current or stream obstructed by accumulation of tailings (S.16(1) and (2)).

Section 17 of the Regulations allows anyone who has recorded a claim under the Yukon Placer Mining Act to run tailings into the river and construct all works necessary for properly operating the claim.

Section 18 of the Regulations reserves to the Crown all roads, ways, bridges, drains, and other public works and improvements, and the right to enter and construct such works. The lessee is not allowed to damage or obstruct works.

In Yukon there have been no dredging operations since 1966 when the last of the gold dredges ceased operation. Any placer mining dredges would be required to obtain a licence from the Yukon Territory Water Board prior to operating.¹⁶

Bill C-187 Yukon Minerals Bill, 1970

The Yukon Minerals Bill was introduced in 1970 and was intended to replace the existing Yukon mining legislation which has changed little since the Klondike gold rush. "The bill would have modernized the system of mining exploration, development and production. Provisions were included that would have provided authority for pollution control and regulation of land use in mining operations. In particular, it would have provided a legislative base for application of the Territorial Land Use Regulations.

However, largely due to strong mining industry representations, the bill was withdrawn and, despite a continuing revision process, it has not yet been reintroduced."¹⁷

¹⁶ MacLeod, Water Management in the Canadian North, the Administration of Inland Waters North of 60°, p. 69.

¹⁷ A.R. Lucas and E.B. Peterson, "Northern Land Use Law and Policy Development: 1972-78 and the Future," p. 70.

STATUS OF MINING EXPLORATION AND DEVELOPMENT IN YUKON¹⁸

A discussion of historical development of the mining industry and some information on the present status of mining in Yukon was presented in Chapter II. Further information on the current status of mining in Yukon is provided here.

During the fiscal year 1977-78 (April 1, 1977-March 31, 1978), five Yukon mines (three underground and two open pit) produced minerals valued at an estimated \$209,745,000. A total of 1,336 persons were employed by the producing mines; an increase of 36 over the 1976 figure.

During the fiscal year mentioned previously, the following mines operated:

Cyprus Anvil Mining Corporation

This company operated a large open pit lead-zinc-silver mine near Faro, 356 km (221 mi.) northeast of Whitehorse. It employed an average of 529 people. The mine operated for 364 days and milled 3 116 232 tonnes (3,435,000 tons) of ore. Ore concentrates were trucked to Whitehorse, then transferred to rail cars and shipped to Skagway, Alaska by rail.

Cassiar Asbestos Corporation¹⁹

This company operated an open pit asbestos mine at Clinton Creek, 103 km (64 mi.) northeast of Dawson. It employed an average of 303 workers.

18 Based on J.A. Morin et al, Mineral Industry Report 1976 Yukon Territory, EGS 1977-1, Indian and Northern Affairs (1977); "The Yukon", Trade and Commerce, Vol. 73, No. 3 (March 1978), pp. 19-43; Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 39; and Department of Indian and Northern Affairs, Supervising Mining Recorder, "Annual Report Fiscal Year 1977/78 Yukon Mining Lands Administration," (April 24, 1978).

19 This mine ceased production July 31, 1978.

The mine operated for 266 days and milled 381 339 tonnes (420,347 tons) of ore. The ore was trucked to Whitehorse, transferred to rail cars and shipped to Skagway, Alaska by rail.

United Keno Hill Mines Limited

This company operated an underground silver-lead-zinc-cadmium mine near Elsa, 452 km (281 mi.) northeast of Whitehorse. It employed an average of 283 people. The mine operated for 253 days and milled 83 909 tonnes (92,492 tons) of ore. Ore concentrates were trucked to Whitehorse, then transferred to rail cars and shipped by rail to Skagway, Alaska.

Whitehorse Copper Mines Limited

This company operated an underground copper mine, which also produced small amounts of gold, at Whitehorse. It employed an average of 208 workers. The mine operated for 365 days and milled 818 596 tonnes (902,332 tons) of ore. Copper concentrates were shipped by rail to Skagway.

Tantalus Butte Coal Mines

This company operated a coal mine near Carmacks. An average of 14 workers was employed at the mine. The mine operated a total of 253 days and shipped a total of 20 652 tonnes (22,765 tons) of coal. This mine began operation in 1923. It is owned by Cyprus Anvil Mining Corporation and supplies coal to the Anvil mine at Faro, where it is used for plant heating and drying of concentrate.²⁰

Mineral production in Yukon is not large by national standards (about 1.7% of the total Canadian value in 1975).²¹

20 J.A. Morin, et al, Mineral Industry Report 1976 Yukon Territory, p. 218.

21 Statistics Canada, Canada Year Book 1976-77 Special Edition, pp. 584-585.

The value of mineral production in Yukon dropped 43% from \$288,840,396 in 1975, to \$130,469,000 in 1976.²² This was due primarily to lengthy strikes at three mines. In 1977 there was a substantial increase over 1976 to approximately \$210,215,000.²³ The value of mineral production for 1977 is given in Table 13.

The number of quartz mining claims staked has steadily increased over the last three fiscal years (April 1-March 31). In 1975-76 the figure was 7,574; it was 10,503 in 1976-77 and 11,868 in 1977-78. At the same time the total number of quartz claims in good standing increased from 31,907 in 1975-76, to 32,663 in 1976-77, and as of March 31, 1978, there were 38,562.²⁴ It has been estimated that about 90% of the claims staked during the calendar year 1977 were for zinc and lead. There was also some interest in uranium and tungsten, and some indications of mercury and tin.²⁵

Although the number of placer claims staked during the fiscal year 1977-78 was substantially down from the previous fiscal year (396 versus 1,766), the total number of placer claims in good standing has risen from 3,837 in the fiscal year 1976-77, to 4,074 in the fiscal year 1977-78. At the same time, under the Yukon Placer Mining Act there was a total of 130 prospecting leases staked the previous fiscal year. The number of prospecting leases in good standing also dropped from a total of 248 in the fiscal year 1976-77, to 200 in the 1977-78 fiscal year.²⁶

Also during the fiscal year 1977-78 there was a total of three leases issued under the Territorial Coal Regulations and lease rentals were

22 J.A. Morin, et al, Mineral Industry Report 1976 Yukon Territory, p 3.

23 Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 46.

24 Department of Indian and Northern Affairs, Supervising Mining Recorder, "Annual Report Fiscal Year 1977/78 Yukon Mining Lands Administration", (April 24, 1978).

25 "The Yukon", Trade and Commerce, Vol. 73, No. 3, p. 21.

26 Department of Indian and Northern Affairs, Supervising Mining Recorder, "Annual Report Fiscal Year 1977/78 Yukon Mining Lands Administration" (April 24, 1978).

TABLE 13

MINERAL PRODUCTION YUKON
January 1, 1977 - December 31, 1977

Mineral	Unit of Production	\$ Value
Gold (excluding placer)	grams ounces	803 864 25,884
Silver	grams ounces	126 254 000 4,065,379
Lead	kilograms pounds	67 698 000 149,247,010
Zinc	kilograms pounds	105 071 000 231,639,520
Cadmium	kilograms pounds	2 900 6,393
Copper	kilograms pounds	11 941 000 26,325,128
Asbestos	tonnes short tons	95 256 105,000
Coal	tonnes short tons	20 652 22,765
Total Value		\$210,215,000

Source:

Annual Report of the Commissioner of Yukon for the Fiscal Year Ending
March 31, 1978, p. 46.

collected from 16 leases. Under the Territorial Dredging Regulation two new dredging leases were issued and three leases were renewed.²⁷

It is estimated that there are six mining properties in Yukon that offer prospects of becoming producing mines. Four of the prospects are in the MacMillan Pass area in southeast Yukon near the Northwest Territories border. The deposits in this area include some of the largest reserves of lead, zinc and tungsten in the western world. The other deposits are in the Faro-Ross River area (lead, zinc) and northwest of Carmacks in the Minto area (copper). The development of these prospects, however, is likely to depend on at least three important factors: (1) the availability of low-priced electrical power, (2) favourable prices for the minerals, and (3) the development of adequate access to the deposits.

QUARRYING LEGISLATION²⁸

TERRITORIAL QUARRYING REGULATIONS

These regulations are pursuant to the Territorial Lands Act and deal with the removal of sand, gravel, loam, clay, etc. from territorial lands.

A quarrying lease may be obtained from the Land Resources Section of DIAND.²⁹ The maximum area obtainable by lease is 12.1 ha (30 a.) for loam, and 64.8 ha (160 a.) for other materials (S.4(2)). After paying a lease fee (\$5), an applicant may obtain a 10-year lease, normally renewable for a further 10 years if the lessee has complied with the terms of the original lease (S.7 and 9). The Regulations do

27 Ibid.

28 Based on Beauchamp, Land Management in the Canadian North, p. 16; Naysmith, Land Use and Public Policy in Northern Canada, pp. 71-72; and Government of the Yukon Territory, Department of Local Government, "Land, Its Development and Disbursement: A Discussion Paper," pp. 30-31.

29 A land use permit is also required for a quarrying operation.

not permit entry on private lands for quarrying purposes because quarrying materials do not fall within the Crown's prerogative reservation of "mineral" rights. If the area under a quarrying lease or permit is already subject to a recorded mineral claim, or an oil and gas lease or permit, the holder of a quarrying lease or permit must obtain the permission of the Minister of DIAND to enter upon the lands (S.13(1)).

Section 10 of the Regulations allows any Yukon resident to take, for his or her own use, without a permit or payment of any fees or dues, up to 38.2 m³ (50 yd.³) of sand, gravel or stone from territorial lands in any calendar year. However, this may not be taken from any territorial lands the surface rights of which have been licensed, leased or disposed of by the Crown. In addition, Section 11 allows a Yukon resident to obtain a free permit to take up to 11.5 m³ (15 yd.³) of loam from territorial lands in any calendar year for his or her own use. Permits are required in all instances where a resident takes more than the allowed annual allotment.

Permits may be issued free of charge to federal and territorial governments and agencies, municipalities, educational, religious and charitable institutions, and hospitals (S.12(2)).

Permits expire when the quantity of material specified has been quarried or removed, or one year from the date of issue, whichever is sooner (S.12(3)).

When any application for quarrying purposes requires an excavation or cuts into a hill, and the land adjoins or is within sight of a road or highway, requirements are written into the lease or permit specifying that a buffer belt of trees, 9 to 15 metres in depth, be left undisturbed so that the excavation is not visible from the road. An access wide enough for the passage of trucks can be left at each end of the buffer.³⁰

³⁰ Department of Indian Affairs and Northern Development, "Land Administration Manual", S.312.17.

The present situation in Yukon is that there are a few quarrying leases in existence and they are primarily possessed by large mining companies. Most of the quarrying operations are carried out under permit.³¹

The Territorial Quarrying Regulations are currently under review with the intent of revising them in the near future. The revision would be designed to provide greater management control over quarrying operations in the Territory.

Control of Quarrying on Commissioner's Lands

Under the Financial Administration Ordinance, Commissioner's Order 1971/416 sets the application fee and royalties for quarrying permits at \$2 and \$.10 per yd.³ respectively.

The discussion paper prepared by the Department of Local Government in November 1977 on land development and disbursement discusses pits and quarries, in particular with respect to the Whitehorse area. The relevant section of that report is outlined below.

The responsibility for management and control for pits and quarries (particularly in respect to the Whitehorse area) has bounced back and forth from the Federal Government, Territorial Government and the City of Whitehorse. The authority now rests with YTG.

Through a cooperative effort, industry representatives, municipal representatives, and YTG have over the past year undertaken to work towards a comprehensive and workable policy respecting pits and quarries. Throughout this process we have been able to determine such basics as:

- (a) the existing sand and gravel needs;
- (b) projected requirements; and
- (c) potential quantities in various areas of the City of Whitehorse.

In trying to come to grips with this previously much neglected matter we must:

- (a) assure some permanency to the aggregate industry;
- (b) some to a compromise between the environmentalists and the industry;

³¹ Personal communication, Regional Manager, Land Resources, DIAND, Whitehorse, May 15, 1978.

- (c) develop pit and quarry regulations with appropriate legislative authority;
- (d) ensure depleted areas are rehabilitated and restored;
- (e) ensure pit management practices are implemented;
- (f) make available, public and private pits; and
- (g) ensure the ultimate locations are supported by the municipal council through zoning designation.

Continuing work on this matter will undoubtedly require additional government funding and staff, but as an objective of the Department it is expected that these goals will be achieved resolving any confusion respecting management, control, rehabilitation, etc. of pits and quarries.

IT IS RECOMMENDED THAT:

- (a) the Department [of Local Government] continue its cooperative efforts with the municipality and other concerned agencies with a view to developing policy for pits and quarries;
- (b) appropriate legislation and supportive regulations be prepared and adopted as soon as possible; and
- (c) the Department's budget reflect appropriate funding required to meet the developed policy objectives and regulations.³²

Ongoing Programs Related to Quarrying in Yukon

Because of problems related to effective management of granular materials, several studies have recently been funded by DIAND.

In 1977 an inventory of existing pits and quarries along Yukon highways was completed. This study was designed to assemble and map existing information on the disposition of granular resources. In order to obtain information on the actual granular resources, another study was carried out during 1977. It covered the area of the Haines Road and Alaska Highway from the B.C.-Yukon border to Kloo Lake. This study identified potential sources, environmental and management aspects regarding the use of these resources.

³² Government of the Yukon Territory, Department of Local Government, "Land, It's Development and Disbursement: A Discussion Paper", pp. 30-31.

In addition to studies of granular resources along roads and highways, a granular survey of the Yukon coastal plain has also been carried out.

An inventory of granular materials within the vicinity of the City of Whitehorse was undertaken in 1977 on behalf of the YTG.³³ This report formed the basis for a planning study prepared for, and adopted by, the City of Whitehorse in 1978.³⁴ A more detailed assessment of quantity and quality of granular materials is now being conducted for the major potential source area identified by the reports. Once this detailed inventory is complete, management plans for the area will be developed in conjunction with quarry regulations to properly control future quarry operations.

INCENTIVE AND ASSISTANCE PROGRAMS AVAILABLE TO ENERGY RESOURCES, MINING AND QUARRYING OPERATORS

In addition to the regulations administered by DIAND which are related to tenure and operations of oil and gas and mining developments, DIAND administers a number of incentive and assistance programs.

Prospectors' Assistance Regulations

These regulations provide financial assistance to qualified prospectors to encourage the search and development of minerals in the Territory. In Yukon there is a Prospectors' Assistance Board, chaired by the Supervising Mining Recorder, which operates the program. In general, prospectors' assistance grants of up to \$1,800 are available to qualified persons who agree to spend 60 days in an approved area and maintain adequate records.

33 R.G. Hilker, Inventory of Gravel, Sand and Loam Deposits in the Whitehorse Metropolitan Area, Yukon Territory Mile 897-Mile 926 Yukon #1 Highway, for Government of the Yukon Territory, Department of Local Government (June 1, 1977).

34 E.P.E.C. Consulting Western Ltd., Report Respecting Quarry Operations - City of Whitehorse, Yukon Territory, 1978.

In conjunction with this program there is an assay service available. A maximum of 15 free assays may be provided to a prospector. The federal government pays 50% of the cost of 10 assays per year for each prospector submitting samples for analysis. This latter program is not widely used in Yukon.³⁵

Northern Mineral Exploration Assistance Program

This program was designed to encourage mineral exploration in the Territories by providing direct financial assistance. The program has been suspended since 1977.³⁶

Other Assistance Programs

Other assistance programs, primarily for infrastructure development (e.g. building of roads, airstrips, etc. under the "Northern Exploration Facilities Program"), are discussed in the next chapter of this report.

ELECTRICAL POWER³⁷

The electrical power generating capacity of the territory is 87 megawatts. This is comprised of 30 thermal or diesel generated and 57 hydro generated megawatts.

The Northern Canada Power Commission (NCPC) is the main producer of electrical power and the Yukon Electrical Company Limited is the main supplier or distributor. This latter company has electrical generating stations located in the following communities: Old Crow, Stewart Crossing, Pelly Crossing, Ross River, Beaver Creek, Destruction Bay, Haines Junction, Whitehorse, Teslin, Swift River and Watson Lake.

35 Personal communication, Supervising Mining Recorder, DIAND Whitehorse, May 16, 1978.

36 Ibid.

37 "The Yukon," Trade and Commerce Magazine, Vol. 73, No. 2, p. 32.

Northern Canada Power Commission (NCPC)

This federal Crown corporation is established under the Northern Canada Power Commission Act. It is involved in the planning, construction and management of public utilities, primarily electrical, on a commercial basis. NCPC is the principal producer of electricity north of 60° and operates the main electrical transmission networks in Yukon and Northwest Territories. In Yukon, NCPC serves Dawson, Faro, Elsa, Johnsons Crossing, Mayo and Whitehorse with electricity.

NCPC's hydro generated power is produced by a 30 megawatt plant at Aishihik, a 20 megawatt plant dam on the Yukon River at Whitehorse, and an additional 6 megawatt dam at Mayo. A 22 megawatt diesel power plant at Whitehorse, a 5 megawatt plant at Faro and two other small diesel plants in Dawson City and Johnsons Crossing are operated by NCPC.

In 1977 a total of 315,000,000 kwh of electrical power was generated in Yukon.³⁸

LAND USE ISSUES RELATED TO ENERGY RESOURCES, MINING AND QUARRYING

Issues associated with the above activities include:

- environmental impacts;
- conflicts with other resource uses;
- problems regarding sound land planning and management because mineral legislation allows extraction of minerals to take precedence over all other types of land use;
- lack of inventory data on aspects such as quarrying to allow for sound management decisions.

38 "The Yukon," Trade and Commerce Magazine, Vol. 73, No. 3, p. 32

Policies adopted to deal with these issues include environmental impact statements; regulations under the Territorial Lands Act and Northern Inland Waters Act; Bill C-20, the proposed new Canada Oil and Gas Act; and the proposed revisions of the Territorial Quarrying Regulations.

XI. TRANSPORTATION¹

The transportation and communications systems of Yukon have long been superior to those in any other part of the Canadian North.² The community of Old Crow, north of the Arctic Circle, is the only community in Yukon inaccessible by road.

In April 1978, 4 276 km (2,657 mi.) of highway were maintained in Yukon. This total consists of 3 180 km (1,976 mi.) of all-weather highway maintained year round, 3 119 km (1,938 mi.) after 1978 and 1 096 km (681 mi.) of highways maintained in the summer only, 1 157 km (719 mi.) after 1978. Of this total, only 201 km (125 mi.) are paved. Main highways are indicated on Map 1.

Two major highway projects were basically completed in 1978. The Carcross-Skagway Road provides road access to tidewater at Skagway, Alaska (this road will be officially opened to traffic in the summer of 1979). The other, the Dempster Highway is completed from Dawson to near

1 Based on Department of Indian Affairs and Northern Development, "Northern Roads Fact Finding Committee, Background and Current Policy" (September 1975); Department of Indian Affairs and Northern Development, 1976-1977 Government Activities in the North (1977); Department of Indian and Northern Affairs, North of 60, Northern Roads (1977); Government of the Yukon Territory, Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 27; Government of the Yukon Territory, Fly Yukon, Road and Air Facilities Map; Government of the Yukon Territory, "Highways Maintained by Department of Highways and Public Works" (April 7, 1978); Government of the Yukon Territory, Policy Governing the Northern Exploration Facilities Program; Government of the Yukon Territory Information Services, This is Canada's Yukon (March 1978); Beauchamp, Land Management in the Canadian North; and Lysyk, Bohmer, and Phelps, Alaska Highway Pipeline Inquiry.

2 Lysyk, Bohmer and Phelps, Alaska Highway Pipeline Inquiry, p. 17.

Inuvik. However, there is no through traffic on this latter road since there are no facilities for crossing the Peel River at Fort McPherson, Northwest Territories, and the MacKenzie River at Arctic Red River, Northwest Territories. The Carcross-Skagway Road and the Dempster Highway will initially be maintained for summer traffic only.

Yukon's rail system consists of a narrow gauge line operated by White Pass and Yukon. It was completed in 1900 during the Klondike gold rush. The rail system carries passengers and freight between Whitehorse and Skagway, Alaska, a distance of about 177 km (110 mi.). Of this total length, about 32 km (20 mi.) are in Alaska, 53 km (33 mi.) in British Columbia and 92 km (57 mi.) in Yukon.

Regularly scheduled flights serve Whitehorse, Mayo, Dawson, Faro, Ross River and Old Crow. The Yukon Road and Air Facilities Map lists 28 landing fields in Yukon. With the exception of the Whitehorse and Watson Lake airports, which are maintained by the federal MOT, all airports and airstrips in Yukon are maintained by the Yukon Department of Highways and Public Works with funding provided by MOT under the Arctic B&C Airport program.

The Alaska Highway remains the single most dominant element in the overall Yukon transportation network. Routine maintenance of this highway is carried out by the government of Yukon under an agreement with Public Works Canada (DPW).

ROADS

There was no definite roads policy in the north until 1956 when a policy began to emerge with the approval of federal expenditures of \$10 million a year, during the following 10 years, for new road construction in Yukon and Northwest Territories.³ After eight years only \$48 million had been spent. A revised roads policy and program was implemented in

³ Department of Indian and Northern Affairs, North of 60, Northern Roads, p. 13.

1965. In that year, the government announced a "Territorial Roads Policy for the Future". That policy stated that northern development was an accepted government policy likely to be achieved only through the successful exploitation of natural resources - mainly minerals, oil and gas. The policy advocated the development of a road network in Yukon and the Mackenzie district of Northwest Territories. This road system would connect communities, provide east-west and north-south transportation, gradually replace seasonal water transportation and achieve a measure of cost equalization with southern Canada. A loop concept was proposed so that any resource road would not, on average, be more than 322 km (200 mi.) from a permanent road.⁴

An Interdepartmental Roads Appraisal Committee was formed to recommend priorities in order of construction. After several years experience with the 1965 Territorial Roads Policy, and the recommendations of the 1967 Northern Roads Fact Finding Committee, revisions were made to the Northern Roads Policy and a new Northern Roads Policy (1971) was adopted. This policy is still in effect, although it is presently under review.

Among major revisions in that policy were: the recognition of the need for measures to further minimize surface disturbance from transportation operations, and identification of the federal DPW as the responsible agency for the supervision of road construction in conjunction with the territorial governments.

The present northern roads policy establishes several categories of roads with a variety of cost-sharing formulae that attempt to achieve the federal government's resource development objectives. DIAND is responsible for a 10-year northern roads network program. The Minister of DIAND is assisted in planning this program by the Interdepartmental Roads Appraisal Committee.

There are two main classes of roads in the territories: communication roads and resource roads.

4 Department of Indian Affairs and Northern Development, "Northern Roads Fact Finding Committee, Background and Current Policy" (September 1975), p. 3.

COMMUNICATION ROADS

These roads are those highways, major roads, secondary and local roads which provide a primary network of roads for communication within the territories, and include north-south connecting links with the provinces and east-west connecting links between each territory. This program consists of the following five categories of roads.

Trunk Highways

These are roads of high construction standards which provide connecting links between the territories and the southern part of Canada or between the main population centres within the territories. All costs of construction and maintenance are paid by the federal government. An example of this type of road is the Alaska Highway.

Secondary Roads

These are roads designed to carry a lower density of traffic and are built to lower construction standards than trunk highways. They may provide connecting links of secondary importance between the territories and southern Canada or between centres of population; or, extend the basic northern roads network into undeveloped areas where it is reasonable to expect a requirement for Resource Roads. All costs of construction and maintenance are paid by the federal government. An example is the Dempster Highway.

Pioneer Roads

These roads are built to a low design standard and provide access to outlying centres of population only. They are built where construction of a higher-standard network is not foreseen for several years. Winter roads are included in this category. All costs of construction and maintenance are paid by the federal government.

Airport Roads

These roads are constructed to connect approved public airports on land or water with the nearest resource or communication road. All costs of construction and maintenance are paid by the federal government.

Local Roads

These are public roads within a community that are constructed and entirely maintained on a seasonal or year-round basis by the local and/or territorial government. Financing is the responsibility of the territorial government. Construction and maintenance are also the responsibility of the territorial government subject to any agreement the Commissioner may make with the local municipal council. Should another category of road later be classified as a local road, the territory and/or local municipality do not have to reimburse the federal government or any private company for costs prior to reclassification. Usually, where a road which is part of a territorial highway system passes through a built-up portion of a municipality or unincorporated settlement, the federal government will pay the cost of construction.

RESOURCE ROADS

These roads are those which lead from a communication road to a location where exploration, development or exploitation of one or more natural resources is being carried out. The following are the five categories of roads under this program.

Area Development Roads

These are roads of medium construction standard into or through an undeveloped region of favourable natural resource potential. The roads are built for the purpose of fostering new growth in the economic activities of the area traversed by the road. The cost of these roads is paid for by the federal government. An example is the Nahanni Range Road.

Pioneer Resource Roads

These roads are built for the same purposes as area development roads but are of a lower standard and intended for instances where construction of the higher standard area development road is not justified. Winter roads are included in this category. The costs are paid by the federal government.

Permanent Access Roads

These are roads which lead from the nearest permanent road to the location of a resource development which has been brought to a "pre-production stage". Construction and maintenance are the responsibility of the company. The federal government may make a total contribution of two-thirds of the cost of construction, but may not exceed 15% of the actual capital invested by the company prior to the commencement of commercial production, or \$40,000 per mile, whichever is the least. An example of this type is the road which was built to the Cassiar Asbestos Mine at Clinton Creek.

Initial Access Roads

These are low-standard roads designed to provide temporary, seasonal or year-round access to a resource project in the exploration or development stage. This category is used when, because of length, terrain or difficult construction, the total cost is such that the maximum contribution under the Northern Exploration Facilities program (formerly the Tote Trail program) is insufficient. Winter roads are included in this category. The cost-sharing terms vary. Federal assistance will not exceed the lesser of the following: 50% of actual road cost; 5% of the company's expenditure on exploration or development; \$10,000 per mile; \$100,000 in one year if the Minister of DIAND considers the project to be primarily exploratory in nature; or \$500,000 annually if the Minister considers the project to be primarily developmental in nature. Construction and maintenance are the responsibility of the parties involved

although contributions for renewal work each season may be on the same basis as above except that no more than 30% of the actual cost of such work may be provided by the federal government.

Northern Exploration Facilities Program⁵

This program includes the former Tote Trails program which was originally established to assist in the construction of low-standard roads designed to provide access to a resource project which was in the exploration or development stage. The original Tote Trails program was expanded to allow financial assistance to be provided for construction of other transportation facilities including low-standard airstrips, helicopter landing pads, small boat docks, and seaplane bases (winter roads are also included in this program). The program was renamed "Northern Exploration Facilities Program" and it is now administered by a committee composed of the Director of Highways and Public Works (chairman), the Director of Yukon Wildlife Branch, Mining Inspector (DIAND), the Resident Geologist (DIAND) and the Superintendent of Forestry (DIAND).

It is the policy of the Yukon government to encourage air travel to exploration areas rather than the use of the traditional tote trails (where nearby trails do not exist). New tote trails will only be permitted if reasonable evidence can be provided that the area in question can only be developed with the provision of road access. This policy applies not only where financial assistance is provided under the Northern Exploration Facilities Program but also where the development program is privately funded.

The construction projects included under this program are intended to provide temporary, seasonal, or year-round access to any natural resource development project such as mining, forestry, agriculture and tourism. The finished work is to be of a low standard, compatible with

⁵ Based primarily on Government of the Yukon Territory, Policy Governing the Northern Exploration Facilities Program.

the intended purpose, and may be used by one or more persons or companies for the purposes of transporting equipment, personnel or supplies. Construction is the responsibility of the person or company concerned and is subject to inspection by the Director of Yukon Highways and Public Works or his representative. The applicant must obtain a land use permit, if necessary, and in case of tote trail construction, a permit from the Director of Highways and Public Works as provided for in Part I S. 3(3) of the Highways Ordinance. Any facility constructed under this program is to be available for public use. Operation and maintenance of the facility is the responsibility of the private interests concerned.

The Commissioner's financial contribution is determined by the Northern Exploration Facilities Program Committee, and shall not exceed the lesser of: 50% of the actual cost of the work; or \$30,000 or 20% of the applicable expenditure on exploration or development of the project. Further contributions may be made if renewal work is required.

CONTROL AND ADMINISTRATION OF ROADS AND ROAD RIGHTS-OF-WAY

All roads in the territories on Crown land remain public roads even though the resource developer may have contributed to the construction. The federal government will contribute only to the cost of roads where the right-of-way is vested in the Crown, and the company applying for assistance must secure for the Crown all surface rights for the entire road.

Once a road has been constructed in Yukon on federal Crown lands, the road and the right-of-way fall under the administration and control of the Commissioner-in-Council. Section 46 of the Yukon Act states in part, that: "all roads, streets, lanes and trails on public lands ... are and remain vested in Her Majesty in right of Canada, but the right to the beneficial use or to the proceeds therof is hereby appropriated to the Commissioner and is subject to the control of the Commissioner in

Council; and any such lands, roads, streets, lanes or trails may be held by and in the name of the Commissioner for the beneficial use of the Territory."

However, if permission to build the road is issued under "licence of occupation" or "lease", then the land is not considered public and the federal Crown could maintain control over activities carried on under the lease.

AIRPORTS AND RAILROADS

AIRPORTS

As mentioned previously, all airports and airstrips throughout Yukon, except Whitehorse and Watson Lake, which are maintained by the federal MOT, are maintained by the Yukon Department of Highways and Public Works.

In February 1974, the federal government adopted a new policy for air transportation, to enable operation of regular, reliable air services. The facilities consist of all-weather runways 914 m (3,000 ft.), 1 524 m. (5,000 ft.) or 1 829 m (6,000 ft.) in length with airport lighting, navigation aids, and passenger, meteorological and radio communication facilities. The length of runway to be provided depends on the community size, the traffic demand and the type of aircraft to be used on the air service. With the exception of Arctic A airports, those with 1 829 m (6,000 ft.) runways, which will continue to be operated by MOT; the Arctic B, 1 524 m (5,000 ft.) runways; and Arctic C 914 m (3,000 ft.) runways, airports will be operated by the local community with funding provided by MOT through the territorial governments.

The provision of these facilities is a multi-year program being undertaken by MOT in consultation with the territorial governments and DIAND.

RAILROADS

The only rail system serving Yukon is a narrow gauge line which was completed in 1900 during the gold rush and is presently operated by White Pass and Yukon. It carries both passengers and freight between Whitehorse and Skagway, Alaska, a distance of 177 km (110 mi.). Of this total length, about 32 km (20 mi.) are in Alaska, 53 km (33 mi.) in British Columbia and 92 km (57 mi.) in Yukon.

There have been some discussions about extending this railway from Whitehorse to the Ross River - Faro area. The possibilities of a rail link between Alaska, Yukon and British Columbia have also been studied.

AGENCIES INVOLVED IN ADMINISTRATION OF TRANSPORTATION PROGRAMS IN YUKON

DEPARTMENT OF HIGHWAYS AND PUBLIC WORKS

The goals and objectives of the Department of Highways and Public Works are outlined below.

Goals

1. To develop and maintain high standard transportation systems for economic development and to enhance the quality of life for Yukoners and others.
2. To provide administrative support service for the provision and maintenance of physical plant and community utilities.

Objectives

1. To improve the quality of territorial highways to increase safety and to reduce transportation costs to all highway users.
2. To expand the highway network to areas of economic and recreation potential.
3. To improve the quality of land and water airport facilities.
4. To expand the airport system to suit economic, social and recreation needs.
5. To construct and maintain government buildings to a high standard.
6. To construct and assist in the maintenance of community utility systems.

7. To provide vehicle transportation and construction equipment to other departments.
8. To co-ordinate telephone and radio communication requirements for all departments.
9. To supply and allocate office accommodation to all departments to provide a healthy and safe working environment.
10. To be cognisant of the need for rail and water transportation and to provide technical advice to Y.T.G. on all engineering matters.⁶

It was indicated previously that the Department of Highways and Public Works maintains a total of 4 276 km (2,657 mi.) of roads; only 201 km (125 mi.) are paved. During the 1977-78 fiscal year 8 037.8 t (8,860 tons) of calcium chloride were applied as dust palliative on 1 427 km (892 mi.) of roads.⁷ The general policy calls for the application of this dust control chemical on highways where the average daily traffic count, from May to October inclusive reaches 250 vehicles or more per day.⁸ In the 1977-78 fiscal year highway maintenance was carried out from 22 highway maintenance camps and from a number of mobile summer camps established for crushing and surfacing operations.

The department also operated the Yukon River ferry service at Dawson and the cable barge service across the Pelly River at the settlement of Ross River. It is also responsible for planning and implementing a number of municipal engineering services on behalf of the Department of Local Government.

⁶ Government of the Yukon Territory, "Goals and Objectives of the Government of the Yukon Territory and Departments", Sessional Paper No. 2 (1976), p. 13.

⁷ Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 27.

⁸ Department of Indian Affairs and Northern Development, "Northern Roads Fact Finding Committee, Background and Current Policy", p. 12.

TRANSPORT CANADA (MOT)⁹

The Arctic Transportation Agency determines and controls development of those elements of the transportation infrastructure in the territories which come under the authority of MOT. The agency aims to provide multi-modal transportation systems which will contribute to the achievement of national objectives in the north. It is involved in formulating an intermodal plan for a transportation system in the territories, including air, marine, road, rail, pipeline and hovercraft, to ensure appropriate and improved services on an integrated basis in the north.

Coordination with other agencies is via the Advisory Committee on Northern Development (ACND) and the Task Force on Northern Oil Development. The role of MOT and the activities of these committees are centred in the Arctic Transportation Agency and its administrator is chairman of their respective transportation subcommittees. More detail on this committee is found in Appendix III.

Among programs being undertaken is one on formulating a railway development strategy. This strategy is being carried out by the Yukon government and federal officials in accordance with MOT's policy principles announced in June 1975.

Implementation of the comprehensive policy to upgrade airports and air navigation facilities and services in the Canadian Arctic was discussed previously in this chapter.

PUBLIC WORKS CANADA (DPW)

Public Works has a continuing responsibility for the development and maintenance of navigable waterways in the north. DPW is also responsible for the construction and upkeep of the Alaska Highway and Haines Road with the government of Yukon performing upkeep on behalf of DPW.

⁹ Department of Indian Affairs and Northern Development, 1976-1977 Government Activities in the North, p. 155.

The department provides an engineering service to DIAND for the location, design and construction of roads under the Northern Roads Program, which includes the Dempster Highway.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT (DIAND)

The Northern Roads and Airstrips Division of DIAND, under the Northern Roads Program, has overall program and policy responsibility for the construction and maintenance of roads in Yukon except for the Alaska Highway and Haines Road, and except for certain roads which are the full responsibility of the YTG. The operation of the Northern Roads Program was explained in detail previously in this chapter.

MAJOR ONGOING TRANSPORTATION PROJECTS IN YUKON

South Yukon Transportation Study

This study of improvement of transportation systems in Yukon involves one road development and several alternate railway proposals. The purpose of the project is to aid in the development of the natural resource potential of Yukon. An environmental assessment panel for this project has been assembled and "Guidelines for the Preparation of an Environmental Analysis of Alternatives for the South Yukon Transportation Study" was issued by the Federal Environmental Assessment Panel, March 21, 1978. As this is not a high priority project at present, it may be a few years before any concrete action is taken on the project.

Alaska Highway Reconstruction and Relocation Watson Lake to Haines Junction

DPW has a long range plan for improvement of the entire Alaska Highway to a modern-day trunk road standard. Over the past several years upgrading has taken place in limited sections based upon demonstrated need.

In order to facilitate identification of environmental concerns in the reconstruction program, DPW has undertaken an environmental overview of that portion of the Alaska Highway in Yukon from km 1 008 (south of Watson Lake) to km 1 635 (Haines Junction). DPW has assembled a group representing relevant agencies, both territorial and federal, to develop guidelines and provide information on the environmental resources of the area. The overview is expected to be completed in 1979.

Shakwak Project

This project, which was discussed previously in Chapter V, involves the reconstruction and paving of Haines Road from the British Columbia-Alaska border to Haines Junction, Yukon, and the Alaska Highway north from Haines Junction to the Yukon-Alaska border, a total distance of about 516 km (321 mi.). The proposed improvements include smoothing curves, improving grades, increasing lane widths and shoulders, and paving.

An international agreement between Canada and the United States, which came into force February 11, 1977, stipulated that, pending environmental clearances, Canada would arrange for reconstruction according to jointly agreed upon standards, and would use funds appropriated by the United States Congress. To date, Congress has appropriated \$58.6 million of the total estimated cost of \$200 million.

As mentioned in Chapter V, the project was registered with the Federal Environmental Assessment and Review Office, a Panel was established and guidelines for preparation of an Environmental Impact Statement were issued in May 1976. An Environmental Impact Statement was completed and submitted by DPW to the Panel, December 30, 1977. Public meetings were held in Whitehorse and affected Yukon communities, March 1978. On May 5, 1978 the Minister of DOE announced that he endorsed the Environmental Assessment and Review Panel's conclusion that the project could be allowed to proceed. The full panel report, issued in July, outlines procedures to be followed and conditions to be met in order to mitigate potential impacts.

Construction of the project is planned to take place over 11 years (1978-1989) and is expected to cost \$200 million. The project will be divided into 18 construction segments of varying length (17 to 34 km). The total work force is expected to reach a peak of about 1,000 in the 1984 and 1985 season, with 80-90% of the personnel employed in the April-November period. Initial work in 1978 was in the Haines Junction area.

Dempster Highway

This highway has been completed. It runs 671 km (417 mi.) from near Dawson to a point where it joins the Mackenzie Highway about 53 km (33 mi.) south of Inuvik, Northwest Territories. This will be the first all-weather direct link between Yukon and Northwest Territories, although at present the road is being maintained for summer traffic only.¹⁰

The Northern Roads and Airstrips Division of DIAND has prepared, in consultation with other federal and territorial agencies, a proposed management plan for the highway. The plan proposes a management committee of a representative from each of the federal, Yukon and Northwest Territories governments, and a native representative from each territory. The proposed plan also deals with post-construction management aimed, in large part, at protecting the Porcupine caribou herd while allowing for year-round use of the highway.

The governments of Yukon and Northwest Territories recently formed a committee to consider management problems along the Dempster Highway.¹¹ The committee consists of four members from each of the governments. It will be consolidating information contained in various studies that have been done on the area. In particular, research related to the Porcupine

10 As mentioned previously, the actual road construction is now completed. However, ferries at the Peel River and the Mackenzie River in the Northwest Territories have not yet been put in service, thus, there is no through traffic on this road.

11 "Yukon, NWT to Manage Dempster", Yukon News, July 26, 1978.

caribou herd will be examined. The committee is expected to make recommendations to the executive committees of both governments for an interim highway management program and a suggested long-term program. A first draft of the committee's report was completed in the fall of 1978; the final report is expected to be available early in 1979.

Commissioner's Order 1977/199 prohibits hunting from October 15 until October 31 within a 8 km (5 mi.) corridor on either side of the Dempster Highway from km 66.9 (mi. 41.6) near the highway camp to the Northwest Territories border. In addition, any activity that prevents or interferes with caribou crossing the highway is deemed to be harassment and is prohibited.

This order covers some of the concerns related to the caribou herd and the Dempster Highway made in Justice Berger's second report, although he recommended that: "A restricted hunting zone should be established that extends two miles on either side of the Dempster Highway and of all connecting access roads and seismic lines within the winter range of the herd, but with provisions made for continued traditional use of this land by native people. All vehicle traffic and construction activity on the Dempster Highway should be controlled during the caribou herd's seasonal migrations through the region.¹²

One of the major concerns that environmentalists have with regard to the Dempster Highway is the fact that there has been no assessment of its environmental impact. This is mentioned both by Berger: "The whole point about the Dempster from an environmental point of view is that the decision to build the highway was made without an adequate environmental assessment,"¹³ and by the Environmental Assessment Panel on the Alaska

12 Berger, Northern Frontier, Northern Homeland, The Report of the Mackenzie Valley Pipeline Inquiry, Volume Two Terms and Conditions, p. 96.

13 Ibid.

Highway pipeline where they recommended that: "An environmental impact assessment of the construction and operation of the Dempster Highway be undertaken immediately."¹⁴

It is the general policy of DIAND that, with respect to the Dempster Highway (and other wilderness roads such as the Carcross-Skagway road), land will not be disposed of other than to the Yukon government.¹⁵

LAND USE ISSUES

Issues associated with transportation land uses, particularly roads, in Yukon are:

- environmental impacts;
- conflicts with other land uses (i.e. wherever there is a road there is a demand for some facilities such as highway maintenance camps, lodges, borrow pits, service facilities, and for land use in agricultural, residential and recreational pursuits).

Policies adopted to deal with these issues include environmental impact statements and regulations under the Territorial Lands Act, e.g. Territorial Land Use Regulations.

14 Fisheries and Environment Canada, Alaska Highway Pipeline: Interim Report of the Environmental Assessment Panel to the Honourable Romeo LeBlanc, Minister of Fisheries and the Environment, (July 27, 1977), p. 53.

15 Personal communication, Regional Manager, Land Resources, DIAND, Whitehorse, May 15, 1978.

XII. WATER¹

The total water area of Yukon is estimated at 4 481 km² (1,730 mi.²).² The largest lake in Yukon is Kluane with an estimated area of 409 km² (158 mi.²). The Yukon River is the longest river in Yukon, travelling an estimated 3 680 km (2,285 mi.) from its source in a chain of lakes straddling the Yukon-British Columbia border to its mouth at the Bering Sea. The Yukon River basin drains over one-half of the Yukon Territory and is the fifth largest drainage basin in North America.³

GOVERNMENT AGENCIES AND LEGISLATION

Policies, programs and legislation related to Yukon's water resources are administered primarily by DIAND (Northern Inland Waters Act and Regulations, Arctic Water Pollution Prevention Act and Regulations). Other federal agencies which administer legislation, policies and programs related to water resources in Yukon are: Department of the Environment (Fisheries Act, Ocean Dumping Control Act, Canada Water Act and Migratory Birds Convention Act); National Health and Welfare (Public Health Ordinance); Ministry of Transport (Canada Shipping Act and Navigable Waters Protecting Act); Energy, Mines and Resources (Dominion

1 Based on Beauchamp, Land Management in the Canadian North, pp. 34-35; The Northern Inland Waters Act and accompanying Regulations; Naysmith, Toward A Northern Balance, p. 19; Government of the Yukon Territory, Annual Report of the Commissioner of Yukon for the Fiscal Year Ending March 31, 1978, p. 40; Department of Indian and Northern Affairs, Procedures, Licensing, Legislation & All That, pp. 10-13; and MacLeod, Water Management in the Canadian North: The Administration of Inland Waters North of 60°.

2 Statistics Canada, Canada Year Book 1976-77 Special Edition, pp. 32-33.

3 Environment Canada, Canada Water Year Book 1975, p. 37.

Water Power Act and Regulations). This latter Act is being phased out.⁴

In addition, the Northern Canada Power Commission (Northern Canada Power Commission Act) influences the production and distribution of electric power. These agencies, policies, programs and legislation are discussed in succeeding pages.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT (DIAND)

The responsibility for administration and management of water resources in Yukon lies with DIAND. The primary piece of legislation providing for this is the Northern Inland Waters Act.

Northern Inland Waters Act

The Act is directed toward managing the inland water resources of Yukon and the Northwest Territories. It was proclaimed in February 1972 and its regulations came into force in September 1972. Because of the integral relationship between allocation of water use and land use, a brief discussion of the Act and supporting regulations will be provided. The Act provides for conservation, development and use of the water resources of Yukon and the Northwest Territories. It also establishes a licensing procedure for the use of waters other than for domestic purposes by establishment of water boards in each territory.

Yukon Territory Water Board

The Northern Inland Waters Act establishes the Yukon Territory Water Board. The Water Board consists of three to nine members appointed by the Minister of DIAND (S.7(1)). It is composed of at least one representative from each of the federal departments most actively concerned with the management of water resources. In Yukon the

⁴ MacLeod, Water Management in the Canadian North: The Administration of Inland Waters North of 60°, p. 84. All new hydro projects will be licensed only under the Northern Inland Waters Act.

departments are DIAND, DOE and Health and Welfare (H & W). In addition, the Act specifies that there are at least three persons named by the Commissioner (S.7(2)(b)). At the moment there are six members appointed by the Minister of DIAND on the recommendation of the Commissioner-in-Council.

The chairman and vice-chairman of the Board are appointed from its members by the Minister of DIAND. The present chairman is one of the members appointed by the Commissioner. The vice-chairman is the Assistant Regional Director, Renewable Resources (the Engineer under the Territorial Lands Act), DIAND. Although not set out in the Act, these members are usually named for two years. The present chairman was appointed to that position in May 1978 for a one-year term.⁵

Under the Act the Minister of DIAND must provide each Board with professional and technical advisers from within the public service in order to allow the Board to carry out its business. In practice, these advisers are from the Water Resources group of DIAND in Whitehorse. The responsibilities of the advisers include: reviewing and assessing all applications for water licences; providing guidance to operators on approved water use practices; setting the terms of reference for water-use impact studies in relation to applications for licences; providing technical expertise and guidance to applicants and licensees; and managing hydrometric and water quality networks in support of licensing.

The objects of the Board are set out in Section 9 of the Act which states: "The objects of the boards are to provide for the conservation, development and utilization of the water resources of the Yukon Territory and Northwest Territories in a manner that will provide the optimum benefit therefrom for all Canadians and for the residents of the Yukon Territory and Northwest Territories in particular."

The Act establishes a licensing procedure for use of water other than for domestic purposes. The regulations set out "water management areas"

5 Personal communication, Regional Manager, Water Resources, DIAND, Whitehorse, May 15, 1978.

where these regulations apply. There are six in Yukon which cover the entire Territory and are the same as those outlined on Map 2.

When an application for a licence is received, the application, along with relevant information (e.g. design drawings and construction plans), is assembled by the Water Resources group of DIAND which acts as staff to the Water Board. The detailed evaluation of the project then begins with the Water Board. The members of the Water Board refer the application and the information to either specialists from government agencies or to consultants for evaluation. Following evaluation by specialists, and after environmental studies have been undertaken, public hearings are held. Then, the special subcommittees of the Water Board consider the terms and conditions to be imposed on the water licence. Three subcommittees have been established under the Board: municipal, mining and hydro-electric. The subcommittees are composed of members of the departments or agencies most concerned with the particular kind of licence under consideration. The water rights staff of DIAND prepares a draft licence which is forwarded to the Water Board for review. The Water Board may have suggestions or comments which necessitate referral back to the subcommittee or staff. After the Water Board approval of the licence it is referred to the applicant for comment. This may be followed by discussions between the subcommittee and the applicant on the specific terms of the licence. The process of drafting conditions for a water licence in Yukon has taken three to six months, depending on the complexity of the licence.⁶

A final draft of the licence is sent to DIAND headquarters in Ottawa-Hull. There, departmental staff and legal personnel check the licence prior to Ministerial approval. The Minister can either approve the license and conditions as recommended by the Board (he does not have authority to alter conditions) or reject the recommendation and return the application to the Board. In the latter case, the Board may return

⁶ Personal communication, Regional Manager, Water Resources, DIAND, Whitehorse, August 31, 1978.

the application to the applicant for amendment and the entire process could be repeated.⁷

Public hearings must be held by the Water Board in connection with every application for a licence or a renewal, and in connection with any application to enter upon, use, occupy, take and acquire any lands or interest in those lands (S.15(2)).⁸ The Act gives the Minister of DIAND authority, on the recommendation of the Water Board, to allow the licensee to enter upon, use, occupy, take and acquire any lands or interest in lands where he feels they are required by a licensee, and that it is in the public interest to allow the lands to be used for such purposes. The licensee must, however, be able to show that he had made reasonable efforts to acquire the lands or interest needed in them and that he has been unable to do so (S.24(1)(a) and (b)). In such instances, a public hearing is also required.

The Board is empowered to require the applicant to provide environmental impact studies on the area to be affected by the proposed water use, and it can attach whatever conditions it considers appropriate regarding type, quantity, method and purpose of use (S.11(2)). Licences may be issued for terms of up to 25 years and are renewable for the same period under the initial or additional conditions (S.12(a)). A licence may be cancelled where a licensee abandons or intends to abandon his right to use the waters, or for three consecutive years fails to exercise his right to use the waters under licence or where he has violated any condition of the licence (S.12(c)).

7 Department of Indian and Northern Affairs, Procedures, Licensing, Legislation & All That, p. 12.

8 If, 10 days prior to the date of a proposed public hearing, no notice is received from any person in connection with an application, and the applicant consents in writing to the disposition of the licence without a public hearing, then the Board may cancel the public hearing, provided that publication of a notice of intent to hold a public hearing has been made.

The Board is required to maintain a register of information on applications for licences received and issued (S.19).

The Governor-in-Council is given power under the Act to reserve lands for the protection of a water resource, or lands in connection with any development where he feels that the land and adjacent waters are in the public interest. This power takes precedence over any other enactment relating to the disposition of territorial lands (S.27(1)). In such instances, the Water Board would be advised not to issue a licence in that area and any other disposition of the land would be of no force or effect (S.27(2)) and (3)).

The Northern Inland Waters Act expressly repeats Sections 54 to 69 of the Yukon Placer Mining Act and Section 121 of the Yukon Quartz Mining Act (S.39). The repealed sections of these mining acts deal with the use of water for mining operations. Thus as, in the Northwest Territories, the use of water in mining operations in Yukon is regulated under the Northern Inland Waters Act.

When the water licence is issued containing conditions for construction, operation or waste disposal, DIAND officials administer the licence. In addition, if a licence is issued, water inspectors carry out regular inspections. As of May 15, 1978 there were four hydro licences, 10 municipal licences, four mining licences and one agricultural licence (total 19) in effect. Neither the Water Board nor the subcommittees have regularly scheduled meetings.⁹

In summary, the Water Board is responsible for coordinating water management activities in Yukon. It also considers all water use applications and makes recommendations to the Minister of DIAND concerning the issuance of any licence. As mentioned previously, a final draft of the licence is sent to Ottawa-Hull for Ministerial approval. The Board, with the approval of the Minister of DIAND, actually issues the licence to the applicant (S.10(1)).

⁹ Personal communication, Regional Manager, Water Resources, DIAND, Whitehorse, May 15, 1978.

Northern Inland Waters Regulations

The Act establishes water management areas which are set out in the Regulations (S.3(2)). They also classify uses of water, define them in some detail (S.5) and establish fees for applications and renewals based on the classification (S.9).

They also authorize the Controller of Water Rights for the Yukon Territory (the Regional Manager of Water Resources, DIAND, Whitehorse) to authorize the use of water without a licence for certain operations if: the proposed use is for municipal purposes by an unincorporated settlement or is for water engineering purposes; the proposed use will continue for a period of less than 270 days; or the quantity of water proposed to be used is less than 227 300 L per day (50,000 gallons per day) (S.3 SOR/75-421 July 18, 1975).

The applicant for a licence may also be required to furnish a security bond which is outlined in the Regulations as being no more than \$100,000 or 10% of the estimated capital cost of the work, whichever is greater (S.13(1)).

During the 1977-78 fiscal year (April 1, 1977 to March 31, 1978) a total of 163 applications for water use were received. Three licences were issued, 148 authorizations to use water without a licence were issued and no public hearings were held. This was substantially down from the 1976-77 fiscal year when a total of 310 applications for water use were received, nine licences were issued, 278 authorizations were issued and three public hearings were held (two for hydro projects and one for municipal use).¹⁰

In Yukon, placer mining accounts for the majority of the authorizations issued (about 65%). Among other activities authorized are: oil drilling operations, diamond drilling and other hard rock mining

10 Personal communication, Regional Manager, Water Resources, DIAND, Whitehorse, May 15, 1978.

development operations, bridge, wharf and culvert construction, and dredging, dyking and river bank alterations.¹¹

Summary of Licensing of Water Flow in Yukon¹²

As with the land use permit system, there is a formal process of review and inspection between the time of receipt of a water use application and the issuance of a licence or authorization. However, because of the complexity of many of the projects and the many factors that may be involved, unlike the land use permit system, no time limit has been set for the review process.

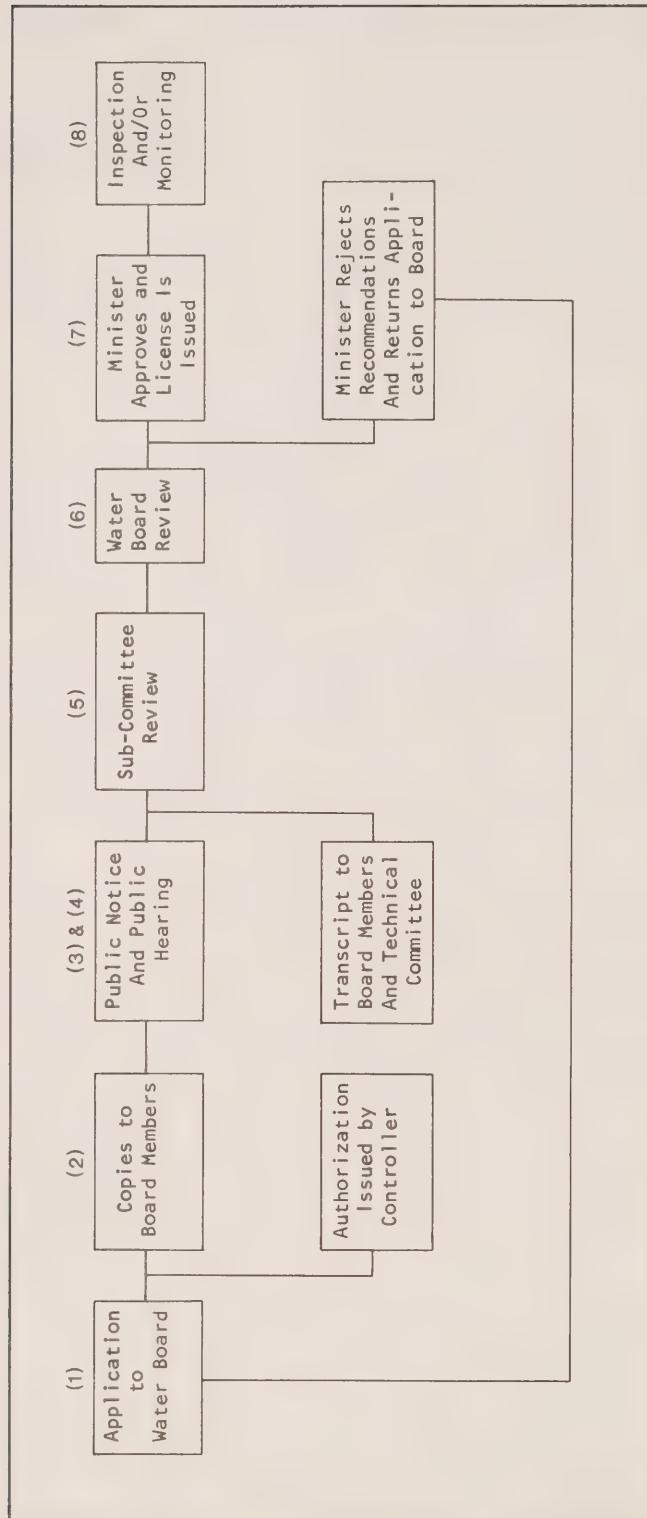
The following is a brief summary of each step in the review process. This process is schematically represented in Figure 5. Numbers preceding each paragraph refer to the numbers along the top of Figure 5.

- (1) The application is received at the office of the Controller of Water Rights. It is then reviewed by the Controller and the Board support staff.
- (2) If the proposed use is within the established limits, the Controller may issue an authorization to the applicant. In every instance, copies of the application and all relevant documents are forwarded to the members of the Water Board.
- (3) The information accompanying the application is examined and, when it is determined that all the required information is provided, the Board must publish a public notice in the Canada Gazette and local papers advising of the nature of the licence applied for and inviting interested parties to submit briefs at the public hearing. All available material is provided for the public at various locations.

11 MacLeod, Water Management in the Canadian North: The Administration of Inland Waters North of 60°, p. 63.

12 Department of Indian and Northern Affairs, Procedures, Licensing, Legislation & All That, pp. 11-12.

FIGURE 5
Water Licensing Flow Chart



Source: DIAND, Procedures, Licensing, Legislation and All That, p. 13.

Note: The numbers along the top of the figure refer to paragraph numbers in the section on summary of licensing of water flow in Yukon.

- (4) Public hearings must normally be held. These hearings are usually held at the community nearest to the location of the proposed water use. However, if no one indicates an intention of intervening, then the need for a public hearing can be waived.
- (5) The public hearing transcripts are forwarded to all Board members and members of the subcommittee. The subcommittee forwards to the Water Board its recommendations regarding any conditions to be attached to the licence.
- (6) A meeting of the Water Board is held to determine whether or not to recommend licence approval. If approval is recommended, the Board also decides conditions to be attached to the licence. These recommendations are forwarded to the Minister of DIAND.
- (7) The Minister either approves the licence and conditions as recommended by the Board (he does not have authority to alter the conditions) or rejects the recommendation and returns the application to the Board. In the latter case, the Board may return the application to the applicant for amendment and the entire process could be repeated.
- (8) Prior to the issuance of any licence, the applicant may be required to provide a security deposit of up to \$100,000 or 10% of the capital cost of the project, whichever is greater. Field staff inspect the project during construction and operation to ensure compliance with licence conditions.

Arctic Waters Pollution Prevention Act and Regulations

This Act was designed primarily to protect the Arctic waters on the north coast of the territories against pollution. It was proclaimed in force August 1972. To protect the ecological balance of water, ice and land areas the Act governs development and shipping activities in Arctic waters and islands adjacent to the mainland and islands of the Canadian Arctic. The Act and regulations will not be discussed in detail here since they were designed primarily to prevent the deposit of waste into northern salt water (the Northern Inland Waters Act governs the deposit of waste in fresh water). The Act has some implications with respect to

land operations by virtue of Section 4(1), which prohibits the deposit of waste on any land on the mainland or Arctic islands where there is the possibility of it entering the salt water. This Act, as well as the Northern Inland Waters Act, is administered by DIAND.

Fisheries Act and Regulations

The Fisheries Act and accompanying regulations were designed, among other things, to prevent land-based activities from depositing substances deleterious to fish or in waters inhabited by fish. The Fisheries and Marine Service of DOE exercises jurisdiction over matters relating only to fish (e.g. supervision of river and stream crossings which may cause sediments harmful to fish). The Environmental Protection Service of DOE has a general pollution prevention jurisdiction under the Act.

Ocean Dumping Control Act

This Act requires a permit to be obtained from the Minister of DOE to dump materials into the sea, which is defined to include "Arctic waters under the Arctic Waters Pollution Prevention Act". The Environmental Protection Service of DOE administers this Act.

Migratory Birds Convention Act and Regulations

Section 35 of this Act relates to the prohibition of the deposit of wastes in waters or areas frequented by migratory birds. The Canadian Wildlife Service of DOE has responsibility for the administration of this Act.

Canada Water Act

The purpose of the Canada Water Act is to indicate the national interest in the protection and management of water resources throughout Canada and to provide a mechanism enabling the federal government to cooperate

with provincial and territorial water authorities in comprehensive water planning and management. The Inland Waters Directorate of DOE has responsibility for the administration of this Act.

Dominion Water Power Act and Regulations

This Act, passed in the late 1940s, vested in the Crown the exclusive right and use of all Dominion water power. The Crown's rights are now reserved by the Northern Inland Waters Act. All dams licensed under the Dominion Water Power Act are being relicensed under the Northern Inland Waters Act as licences under the old act expire. All new hydro projects are being licensed under the Northern Inland Waters Act only.¹³ The Dominion Water Power Act is administered by the Department of Energy, Mines and Resources (EMR).

Northern Canada Power Commission Act¹⁴

This Act establishes the Northern Canada Power Commission (NCPC), a federal Crown corporation involved in the planning, construction and management of public utilities, primarily electrical, on a commercial basis. The Commission is the principal producer of electricity north of 60° and operates the main electrical transmission networks in Yukon and Northwest Territories. NCPC's hydro generated power is produced by a 30 megawatt plant at Aishihik, a 20 megawatt dam on the Yukon River at Whitehorse, and an additional six megawatt dam at Mayo. Additional information on NCPC and hydro electric power was provided in the Chapter X.

13 Macleod, Water Management in the Canadian North: The Administration of Inland Waters North of 60°, p. 84.

14 Northern Canada Power Commission, 29th Annual Review for the Year Ended March 31, 1977, and Government of the Yukon Territory, Information Services, This is Canada's Yukon, p. 7.

INTERGOVERNMENTAL/INTERAGENCY COOPERATIVE PROGRAMS

There are a number of ongoing programs in Yukon which are related to water resources. These are carried out on a cooperative interagency basis and are outlined below.

YUKON RIVER BASIN¹⁵

Officials dealing with water management in the Yukon River basin (Map 2) have become concerned with conflicts which are developing among mining, hydro, parks, energy and transportation interests. Consequently, DOE and DIAND have established a preplanning task force to examine water and related resources of the Yukon River basin. British Columbia and Yukon officials will also participate on the task force. During 1978 and 1979 the task force is expected to prepare a rationale and plan, if appropriate, for a subsequent cost-shared intergovernmental study agreement.

MACKENZIE RIVER BASIN STUDY AGREEMENT¹⁶

An agreement respecting federal-provincial studies and investigations of water resources in the Mackenzie River basin became effective April 1, 1978. This agreement, signed by the federal, British Columbia, Alberta and Saskatchewan governments, terminates August 31, 1981. It provides for the expenditure of \$1.6 million with 50% of the costs to be paid by DOE and MOT, 26% by DIAND, and the remaining 24% to be distributed among the provinces concerned.

Although the majority of the area covered by the agreement lies outside the Yukon Territory, the Liard and Peel River watersheds drain into the Mackenzie (Map 2).

15 Fisheries and Environment Canada, Inland Waters Directorate, Interdepartmental Committee on Water Newsletter, Series II, No. 11 (March 1978).

16 "An Agreement Respecting Federal-Provincial Studies and Investigations of the Water Resources in the Mackenzie River Basin" (April 1, 1978).

Those signing the agreement have agreed to undertake studies designed to increase their understanding of the water and related resources of the Mackenzie River basin. The studies will be under the direction of the Mackenzie River Basin Committee which is comprised of 12 members: two from each of the provinces of British Columbia, Alberta and Saskatchewan, one each from the Northwest Territories, Yukon, DIAND, MOT and two representatives from DOE.

For the 1978-79 fiscal year the work program includes a review of pipeline documents for water resource management information, identification of areas sensitive to change in the hydrologic system, study of the spring flood, and a public information program. The budget for the 1979-80 program is \$500,000.

DOE/DIAND COOPERATIVE PROGRAM

A water quantity coordinating committee has been established consisting of representatives of DOE (Water Survey of Canada) and DIAND (Water Resources). This committee is responsible for the planning, construction, and operation of the water quantity network in Yukon. A parallel committee operates in the Northwest Territories.

In the 1976-77 fiscal year, 48 hydrometric gauging stations were operated in Yukon. Sediment data were collected at six of these stations.

Under the DOE/DIAND cooperative agreement, the Water Survey of Canada carries out field activities and arranges to publish the data collected for all gauging stations covered by the agreement. DIAND collects additional information on small streams for use in flood forecasting and highway culvert design.

FEDERAL POLICY STATEMENT ON INLAND WATERS

On April 10, 1978, a federal policy statement on inland water was issued.¹⁷ This policy statement outlines the importance of water to Canadians, lists the responsibilities of the government of Canada for water, and lists 16 federal policies relating to inland waters which include policies ranging from conservation to joint cost-shared programs.

LAND USE ISSUES RELATED TO WATER USE

Issues related to the use of water and its consequent effect on land use include:

- possible conflicts among, mining, hydro, parks, energy and transportation interests;
- where land use regulations do not apply, regulations under the Northern Inland Waters Act are often the only control over environmental impacts, e.g. placer mining;
- preservation of unique and special water resources, e.g. thermal springs, special fish and wildlife habitat.

In an attempt to deal with these issues the federal government has introduced, and in some cases has updated, legislation including: the Northern Inland Waters Act and Regulations; Arctic Waters Pollution Prevention Act and Regulations; Fisheries Act and Regulations; Ocean Dumping Control Act and Canada Water Act. Interagency cooperative study programs, such as the Yukon River Basin study, have also been initiated.

¹⁷ "Federal Policy Statement on Inland Waters" (April 10, 1978).

XIII. SUMMARY AND CONCLUSION

SUMMARY

In the preceding chapters (III through XII), issues and concerns regarding land use and land management within various land use sectors were discussed. They are summarized below.

CHAPTER III.

Issues and problems associated with the administration and management of land and land use are:

- uncertainties with respect to a native land claim settlement;
- jurisdictional division of responsibilities for land between the federal and territorial governments (e.g. the federal government has responsibility for land disposition and use in the area generally outside of organized communities; whereas the territory has responsibility over the means of controlling or directing the use of land - planning, zoning and taxation);
- general lack of background natural resource information on which to base decisions regarding administration and management of the land resource. Land management is presently being carried out on the basis of administration and regulations with a limited information base;
- the lack of land use planning or planning programs;
- lack of base maps at the appropriate scale on which to record land dispositions;
- lack of an appropriate legal land location system that is easily understood by the public, e.g. the familiar township grid in southern Canada.

In an attempt to deal with some of these issues, funding is being provided by both territorial and federal governments for studies aimed at ensuring that more adequate baseline information will be available. The Federal-Territorial Lands Advisory Committee has been established to provide federal-territorial liaison and to assist in improving land administration and management decisions. The Land Use Advisory Committee has been established to provide advice on the control of land use operations.

CHAPTER IV.

Land use issues associated with communities, land use planning and regional development are:

- no overall land use plan for Yukon;
- no regional plans in place in Yukon;
- the lack of land use planning or planning programs and baseline information (e.g. maps at a suitable scale, information on the biological and physical attributes of the land base, land use information) on which to base decisions regarding administration and management of the land resource base;
- the absence of a structured or phased resource inventory program to assemble the information required.

In an attempt to deal with some of these issues, DIAND is funding studies to acquire additional background natural resource information and has embarked on a cooperative regional planning program with the territorial government which will cover selected areas of the territory over the next five years. Additional information which will assist in planning the use of renewable resources and in the development of overall land management policies for the territory should become available through the program proposed in the subsidiary agreement under the federal-territorial General Development Agreement.

CHAPTER V.

Environmental issues in Yukon include:

- the effect of proposed large-scale development projects on the environment (e.g. hydro-electric, gas pipeline, mines, highway construction);
- water pollution;
- transport, storage and disposal of hazardous chemicals and petroleum products;
- solid waste management;
- abandonment and restoration plans for development such as mines.

Policies and legislation adopted to deal with these issues include environmental impact statements, the federal Environmental Assessment and Review Process, 1977 amendments to the Territorial Land Use Regulations, and revisions to the Fisheries Act.

CHAPTER VI.

Issues associated with agricultural land uses in Yukon are:

- the absence of an agricultural and grazing policy;
- a split in responsibility between the federal and territorial governments; the federal government has responsibility for land disposition while the territorial government has responsibility for development of an agricultural policy.

In an attempt to deal with these issues DIAND and the Yukon government have funded studies regarding the capability and potential for agricultural development in Yukon. Long-term land disposal policies for northern agriculture are now under preparation.

CHAPTER VII.

Among the land use issues associated with forestry are:

- environmental effects of harvesting practices;
- regeneration techniques;
- lack of sufficient information on the forest resource to allow for long-range planning of forest resource use (e.g. the only record of timber cutting is the permits issued).

In an attempt to deal with some of these issues, DIAND, in cooperation with DOE (Canadian Forestry Service and Forest Management Institute), is engaged in experimental research programs to obtain more precise information on the forest resource of the territory.

CHAPTER VIII.

Issues associated with recreational land use in Yukon are:

- delays in meeting demands for cottage sites because of uncertainties with respect to a native land claim settlement and conflicts with other resource uses;
- increased development, increased population, and increased access creates additional demands on the recreational resources of the territory;
- general lack of land use planning or planning programs and natural resource information on which to base decisions regarding administration and management of the land resource base;
- lack of legislation, policy, plans, funding and absence of a territorial parks system results in an ad hoc approach to providing recreational opportunities and recreational land use in Yukon.

In an attempt to deal with some of these problems, DIAND has developed a cottage subdivision policy. In addition, DIAND has commissioned studies to identify potential cottage subdivision sites and has begun infilling in some cottage areas. DIAND has been working with the territorial government towards clarification of land status of campgrounds and picnic sites with a view towards eventual transfer of all of these to the territorial government to form part of a territorial park system. The territorial government has been developing a territorial parks ordinance and it is anticipated that it will be tabled in the legislature late in 1979,

CHAPTER IX

Issues associated with fish and wildlife land use are:

- effects of development on fish and wildlife resources;
- spin-off effects of major projects on the fish and wildlife resource (e.g. hydro-electric developments, mines, increased population, increased fishing and hunting pressures on the resources);
- conflicts between resource uses (e.g. recreation, forestry, wildlife, fishing);
- lack of baseline data on the renewable resource base.

In an attempt to provide more information on the effects of developments on the fish and wildlife resource, and to assemble more information on these resources, the Yukon Wildlife Branch, Canadian Wildlife Service and Fisheries and Marine Service have been carrying out additional studies. Many of these studies have been oriented to the possible effects of specific projects on these resources, e.g. Alaska Highway natural gas pipeline, while others are of a long-term nature; the results will not be available for a few years.

CHAPTER X.

Issues associated with energy resources, mining and quarrying include:

- environmental impacts;
- conflicts with other resource uses;
- problems regarding sound land planning and management because mineral legislation allows extraction of minerals to take precedence over all other types of land use;
- lack of inventory data on aspects such as quarrying to allow for sound management decisions.

Policies adopted to deal with these issues include environmental impact statements; regulations under the Territorial Lands Act and Northern Inland Waters Act; Bill C-20, the proposed new Canada Oil and Gas Act; and the proposed revisions of the Territorial Quarrying Regulations.

CHAPTER XI.

Issues associated with transportation land uses, particularly roads, in Yukon are:

- environmental impacts;
- conflicts with other land uses (i.e. wherever there is a road there is a demand for facilities such as highway maintenance camps, lodges, borrow pits, service facilities, and for land use in agricultural, residential and recreational pursuits).

Policies adopted to deal with these issues include environmental impact statements and regulations under the Territorial Lands Act, e.g. Territorial Land Use Regulations.

CHAPTER XII.

Issues related to the use of water and its consequent effect on land use include:

- possible conflicts among mining, hydro, parks, energy and transportation interests;
- where land use regulations do not apply, regulations under the Northern Inland Waters Act are often the only control over environmental impacts, e.g. placer mining;
- preservation of unique and special water resources, e.g. thermal springs, special fish and wildlife habitat.

In an attempt to deal with these issues the federal government has introduced, and in some cases has updated, legislation including: the Northern Inland Waters Act and Regulations; Arctic Waters Pollution Prevention Act and Regulations; Fisheries Act and Regulations; Ocean Dumping Control Act and Canada Water Act. Interagency cooperative study programs, such as the Yukon River Basin study, have also been initiated.

CONCLUSION

It has been stated that public land policy in Yukon (and the Northwest Territories) has basically been "... a series of responses to demands for land, rather than a framework within which decisions respecting use and management are made on the basis of the land itself."¹

The lack of, and the need for, an overall plan for land use in Yukon has been recognized. Although there are general policies regarding land administration, e.g. the disposition of land for uses such as cottaging and agriculture, there is no guiding philosophy of land management in

¹ Naysmith, Land Use and Public Policy in Northern Canada, p. 3.

Yukon at either the federal or territorial level. This lack of a clearly articulated land use policy causes problems for those responsible for the planning and management of land in the territory.

One of the major difficulties associated with planning for effective land use in Yukon is the jurisdictional division of responsibilities for land between the federal and territorial governments. The federal government has responsibility for land disposition and use in the area entirely outside of organized communities (i.e. virtually all of the land in the Yukon); whereas the territory has responsibility over the means of controlling or directing the use of the land (planning, zoning and taxation). Because each level of government has certain responsibilities related to land and land management but not total responsibility, the result is fractured land management.

There are no regional land use plans in place in Yukon and it is only in the past year that an attempt has been made to assemble the detailed background information required for preparation of such plans.

There is a general lack of baseline information such as base maps at an appropriate scale, and biological and physical information about the land resources on which to base decisions regarding disposition, planning and management of the Yukon land resource. Numerous studies have been carried out on a broad regional scale or very site-specific scale, but no structured or phased resource inventory program has been conducted.

The agencies responsible for the management of land resources at both levels of government, the territorial Department of Local Government and the Land Resources group of the federal Department of Indian Affairs and Northern Development, have only limited capacity to effectively respond to the increase in demand for services expected to occur from ongoing and proposed major developments.

The foregoing problems have been recognized by officials at the territorial and federal levels, and positive steps are being taken to make land use planning and management more effective in Yukon. Within the last year the territorial government has prepared a major policy paper on the development and disbursement of land. The territorial government, in cooperation with the Land Resources group of the Department of Indian Affairs and Northern Development, has embarked upon a regional planning program. A proposed land management plan for the first region considered under this program, the Whitehorse north area, is in the final stages of development. A similar program covering a second area under study, the Whitehorse-Carcross-Jakes Corner area, is currently underway. The federal and territorial governments are also involved in a number of other cooperative projects which will have a significant effect on land use and management in Yukon, including the development of a policy regarding agricultural land use, the Yukon River basin study and the Dempster Highway management plan.

Yukon is at a critical stage in its development. A number of ongoing, impending and proposed developments and projects - land claims, natural gas pipeline, mines, hydro-electric development - could have a major impact on the land resource of the territory. Close cooperation between the federal and territorial governments, special interest groups, and the general public will be required to ensure the judicious administration, planning and management of the land resource.

APPENDICES

Registration
SOR/77-210 4 March, 1977

TERRITORIAL LANDS ACT

Territorial Land Use Regulations

P.C. 1977-532 3 March, 1977

Whereas it is necessary for the protection of the ecological balance of the Yukon Territory and the Northwest Territories to set apart and appropriate each of the said Territories as separate land management zones;

And Whereas pursuant to sections 3.1 and 3.2 of the Territorial Lands Act consultations have taken place with the Council of the Yukon Territory and the Council of the Northwest Territories respecting the setting apart and appropriating of such lands as land management zones and respecting the making of the annexed regulations.

Therefore, His Excellency the Governor General in Council, on the recommendation of the Minister of Indian Affairs and Northern Development, pursuant to sections 3.1, 3.2 and 19 of the Territorial Lands Act, is pleased hereby to revoke the Territorial Land Use Regulations made by Order in Council P.C. 1971-2287 of 2nd November, 1971¹, as amended², and to make the annexed Regulations respecting land use operations in the Yukon Territory and the Northwest Territories in substitution therefor.

**REGULATIONS RESPECTING LAND USE
OPERATIONS IN THE YUKON TERRITORY AND
THE NORTHWEST TERRITORIES**

Short Title

1. These Regulations may be cited as the *Territorial Land Use Regulations*.

Interpretation

2. In these Regulations,

“Act” means the *Territorial Lands Act*; (*loi*)

“Class A Permit” means a permit issued pursuant to section 25; (*permis de catégorie A*)

“Class B Permit” means a permit issued pursuant to section 27; (*permis de catégorie B*)

“crossing” means any bridge, causeway or structure or any embankment, cutting, excavation, land clearing or other works used or intended to be used to enable persons, vehicles or machinery to cross any stream, highway or road; (*passage*)

“district oil and gas conservation engineer” means a conservation engineer appointed pursuant to the *Oil and Gas Pro-*

Enregistrement
DORS/77-210 4 mars 1977

LOI SUR LES TERRES TERRITORIALES

Règlement sur l'utilisation des terres territoriales

C.P. 1977-532 3 mars 1977

Vu qu'il est nécessaire pour la protection de l'équilibre écologique du territoire du Yukon et des territoires du Nord-Ouest de mettre à part et d'affecter chacun de ces territoires comme une zone séparée de gestion des terres;

Et vu qu'en vertu des articles 3.1 et 3.2 de la Loi sur les terres territoriales des consultations ont eu lieu avec le Conseil du territoire du Yukon et le Conseil des territoires du Nord-Ouest concernant la mise à part et l'affectation de ces terres comme zones de gestion des terres et concernant l'établissement des règlements ci-après.

A ces causes, sur avis conforme du ministre des Affaires indiennes et du Nord canadien et en vertu des articles 3.1, 3.2 et 19 de la Loi sur les terres territoriales, il plaît à Son Excellence le Gouverneur général en conseil d'abroger le Règlement sur l'utilisation des terres territoriales établi par le décret C.P. 1971-2287 du 2 novembre 1971¹, dans sa forme modifiée², et d'établir en remplacement le Règlement sur l'exploitation des terres dans le territoire du Yukon et les territoires du Nord-Ouest, ci-après.

**RÈGLEMENT SUR L'EXPLOITATION DES TERRES
DANS LE TERRITOIRE DU YUKON ET LES
TERRITOIRES DU NORD-OUEST**

Titre abrégé

1. Ce règlement peut s'intituler: *Règlement sur l'utilisation des terres territoriales*

Interprétation

2. S'entend par

«arpenteur en chef» l'arpenteur en chef défini dans la *Loi sur l'arpentage des terres du Canada*; (*Surveyor General*)

«borne-signal» un poteau, un jalon, une jalonnnette, un monticule, une fosse, une tranchée, ou tout autre objet, chose ou moyen utilisé pour marquer officiellement la limite d'une terre arpentée ou placée ou établie à des fins topographiques, géodésiques ou cadastrales; (*monument*)

«cours d'eau» un lac, une rivière, un étang, un marais, un marécage, un canal, un ruisseau, un ravin ou un couloir au fond duquel coule de l'eau continûment ou par intermission; (*stream*)

¹ SOR/71-580, *Canada Gazette Part II*, Vol. 105, No. 22, November 24, 1971

² SOR/75-661, *Canada Gazette Part II*, Vol. 109, No. 22, November 26, 1975

duction and Conservation Act; (*ingénieur de district pour la conservation du pétrole et du gaz*)

“Dominion Geodesist” means the Dominion Geodesist and Director of the Geodetic Survey, in the Department of Energy, Mines and Resources; (*géodésien fédéral*)

“Engineer” means, in respect of any provision of these Regulations, the Engineer designated by the Minister pursuant to section 4 for the purposes of that provision; (*ingénieur*)

“geophysical survey” means any investigation carried out on the surface of the ground to determine the nature and structure of the subsurface; (*levé géophysique*)

“inspector” means an inspector designated by the Minister pursuant to section 5; (*inspecteur*)

“land use operation” means any work or undertaking on territorial lands that requires a permit; (*exploitation des terres*)

“letter of clearance” means a letter issued by the Engineer pursuant to section 37; (*lettre d’acquittement*)

“line” means a route used to give surface access to any land for the purpose of carrying out a geophysical, geological or engineering survey; (*ligne de levé*)

“man-day”, with respect to the use of a campsite, means the use of that campsite by one person for twenty-four hours; (*jour-homme*)

“Minister” means the Minister of Indian Affairs and Northern Development; (*Ministre*)

“monument” means any post, stake, peg, mound, pit, trench or any other object, thing or device used to officially mark the boundary of any surveyed lands, or placed or established for any topographic, geodetic or cadastral purpose; (*borne-signal*)

“permit” means a Class A Permit or a Class B Permit; (*permis*)

“permittee” means the holder of a permit and includes a person engaged in a land use operation or anyone employed by a permittee to conduct a land use operation; (*détenteur de permis*)

“rig release date” means the date on which, in the opinion of a district oil and gas conservation engineer, a well drilled for the purpose of discovering or producing oil and gas has been properly terminated; (*date de renvoi de l’équipe*)

“rock trenching” means any excavation carried out on a mineral claim for the purpose of obtaining geological information; (*forage dans le roc*)

“spud-in” means the initial penetration of the ground for the purpose of drilling an oil or gas well; (*percée*)

“stream” means any lake, river, pond, swamp, marsh, channel, gully, coulee or draw that continuously or intermittently contains water; (*cours d’eau*)

“Surveyor General” means the Surveyor General as defined in the *Canada Lands Surveys Act*; (*arpenteur en chef*)

“territorial lands” means lands in the Yukon Territory or in the Northwest Territories

(a) that are vested in the Crown or of which the Government of Canada has power to dispose, and

«date de renvoi de l’équipe» la date à laquelle, de l’avis de l’ingénieur de district pour la conservation du pétrole et du gaz, un puits foré dans le but de découvrir ou de produire du pétrole ou du gaz a été dûment terminé; (*rig release date*)

«détenteur de permis» un détenteur de permis se livrant à une exploitation des terres et toute personne employée à cette fin; (*permittee*)

«exploitation des terres» un travail ou une activité exercée sur des terres territoriales et exigeant un permis; (*land use operation*)

«forage dans le roc» une excavation faite dans un claim minier pour obtenir des renseignements d’ordre géologique; (*rock trenching*)

«géodésien fédéral» le géodésien fédéral et le directeur du Service géodésique du ministère de l’Énergie, des Mines et des Ressources; (*Dominion Geodesist*)

«ingénieur» l’ingénieur nommé par le Ministre selon l’article 4; (*Engineer*)

«ingénieur de district pour la conservation du pétrole et du gaz» un ingénieur de la conservation nommé selon la *Loi sur la production et la conservation du pétrole et du gaz*; (*district oil and gas conservation engineer*)

«inspecteur» un inspecteur nommé par le Ministre selon l’article 5; (*inspector*)

«jour-homme» dans le cas de l’utilisation d’un campement, l’utilisation de ce campement par une personne durant vingt-quatre heures; (*man-day*)

«lettre d’acquittement» une lettre délivrée par l’ingénieur selon l’article 37; (*letter of clearance*)

«levé géophysique» une recherche effectuée à la surface du sol pour déterminer la nature et la structure sous-jacentes; (*geophysical survey*)

«ligne de levé» une route d’accès à un terrain, utilisée pour l’exécution de levés géophysiques, géologiques ou de génie civil; (*line*)

«lois» la *Loi sur les terres territoriales*; (*Act*)

«Ministre» le ministre des Affaires indiennes et du Nord canadien; (*Minister*)

«passage» un pont, une chaussée, une structure, une digue, une tranchée, une excavation, un espace libre ou autres travaux permettant ou destinés à permettre à des personnes, véhicules ou machines de franchir un cours d’eau, un chemin ou une route; (*crossing*)

«percée» la première pénétration du sol pour le forage d’un puits de pétrole ou de gaz; (*spud-in*)

«permis» un permis de catégorie A ou B; (*permit*)

«permis de catégorie A» désigne un permis délivré selon l’article 25; (*Class A Permit*)

«permis de catégorie B» un permis délivré selon l’article 27; (*Class B Permit*)

«terres territoriales» les terres comprises dans les territoires du Nord-Ouest ou dans le territoire du Yukon

a) dévolues à la Couronne ou dont le gouvernement du Canada a le pouvoir de disposer; et

b) dont le Ministre a le contrôle, la gérance et l’administration.

(*territorial lands*)

(b) that are under the control, management and administration of the Minister.
(*terres territoriales*)

Establishment of Land Management Zones

3. The Yukon Territory and the Northwest Territories are hereby set apart and appropriated as land management zones.

Designation of the Engineer

4. The Minister may designate any officer of the Department of Indian Affairs and Northern Development as Engineer for the purposes of any provision of these Regulations.

Designation of Inspectors

5. The Minister may designate any person as an inspector for the purposes of these Regulations.

Exemption from Regulations

6. These Regulations do not apply to

- (a) anything done by a resident of the Yukon Territory or the Northwest Territories in the normal course of hunting, fishing or trapping;
- (b) anything done in the course of prospecting, staking or locating a mineral claim unless it requires a use of equipment or material that normally requires a permit;
- (c) lands whose surface rights have all been disposed of by the Minister; or
- (d) a timber operation conducted pursuant to section 8 of the *Territorial Timber Regulations*.

7. No person shall engage in a land use operation except in accordance with these Regulations and the *Northern Inland Waters Act* and regulations made thereunder.

Prohibitions

8. No person shall, without a Class A Permit, carry on any work or undertaking on territorial lands that involves

- (a) the use, in any thirty day period, of more than 150 kg of explosives;
- (b) the use, except on a public road or trail maintained wholly or in part by federal funds, of any vehicle that exceeds 10 t net vehicle weight;
- (c) the use of any power driven machinery for earth drilling purposes whose operating weight, excluding the weight of drill rods or stems, bits, pumps and other ancillary equipment, exceeds 2.5 t;
- (d) the establishment of any campsite that is to be used for more than 400 man-days;
- (e) the establishment of any petroleum fuel storage facility exceeding 80,000 l capacity or the use of a single container for the storage of petroleum fuel that has a capacity exceeding 4,000 l;
- (f) the use of any self-propelled power driven machine for moving earth or clearing land of vegetation;

Constitution de zones de gestion des terres

3. Le territoire du Yukon et les territoires du Nord-Ouest sont mis à part et affectés à titre de zones de gestion des terres.

Nomination de l'ingénieur

4. Le Ministre peut désigner un fonctionnaire du ministère des Affaires indiennes et du Nord canadien pour agir comme ingénieur, aux fins de ce règlement.

Nomination des inspecteurs

5. Le Ministre peut désigner toute personne pour agir comme inspecteur aux fins de ce règlement.

Portée du règlement

6. Ce règlement ne s'applique pas

- a) aux activités de chasse, de pêche et de trappe exercées par un résident du territoire du Yukon ou des territoires du Nord-Ouest;
- b) aux activités de prospection, de jalonnage ou de localisation d'un claim minier, à moins qu'elles ne requièrent l'utilisation d'équipement ou de matériaux nécessitant un permis;
- c) aux terres dont tous les droits de surface ont été cédés par le Ministre; ni
- d) aux travaux de coupe de bois entrepris selon l'article 8 du *Règlement sur le bois des Territoires*.

7. Nul ne peut entreprendre l'exploitation des terres à moins de se conformer à ce règlement, à la *Loi sur les eaux intérieures du Nord* et au règlement établi selon cette loi.

Interdictions

8. Nul ne peut, sans un permis de catégorie A, entreprendre, sur des terres territoriales, un travail ou une activité impliquant

- a) l'utilisation, au cours d'une période de trente jours, de plus de 150 kg d'explosifs;
- b) l'utilisation, sauf sur une voie publique ou un sentier entretenu en totalité ou en partie à même les deniers publics, d'un véhicule de plus de 10 tonnes;
- c) l'utilisation d'une machine motorisée de forage dont le poids durant les travaux est supérieur à 2.5 tonnes, non compris le poids des tiges de forage ou des maîtresses-tiges, des trépans, des pompes et autres accessoires;
- d) l'installation d'un campement destiné à l'utilisation pour plus de 400 jours-hommes;
- e) aux fins d'entreposage du combustible, la création d'installations ayant une capacité supérieure à 80 000 litres ou l'utilisation d'un seul réservoir ayant une capacité supérieure à 4 000 litres;
- f) l'utilisation, pour le terrassement et l'essartage, d'une machine motorisée autoguidée;

(g) the use of any stationary power driven machine for hydraulic prospecting, moving earth or clearing land, other than a power saw; or

(h) the levelling, grading, clearing, cutting or snowploughing of any line, trail or right-of-way exceeding 1.5 m in width and exceeding 4 ha in area.

9. No person shall, without a Class B Permit, carry on any work or undertaking on territorial lands that involves

(a) the use, in any thirty day period, of more than 50 kg but less than 150 kg of explosives;

(b) the use, except on a public road or trail maintained wholly or in part by federal funds, of any vehicle that is more than 5 t but less than 10 t net vehicle weight, or the use of any vehicle of any weight that exerts pressure on the ground in excess of 35 k pa;

(c) the use of any power driven machinery for earth drilling purposes whose operating weight, excluding the weight of drill rods or stems and bits, pumps and other ancillary equipment, is more than 500 kg but less than 2.5 t;

(d) the establishment of any campsite that is to be used by more than two people for more than 100 but less than 400 man-days;

(e) the establishment of any petroleum fuel storage facility that has a capacity of more than 4000 l but less than 80,000 l or the use of a single container for the storage of petroleum fuel that has a capacity of more than 2000 l but less than 4000 l; or

(f) the levelling, grading, clearing, cutting or snowploughing of any line, trail or right-of-way exceeding 1.5 m in width but not exceeding 4 ha in area.

10. No permittee shall, unless expressly authorized in his permit or expressly authorized in writing by an inspector

(a) conduct a land use operation within 30 m of a known monument or a known or suspected archaeological site or burial ground;

(b) when excavating territorial land within 100 m of any stream, excavate at a point that is below the normal high water mark of that stream;

(c) deposit on the bed of any stream any excavated material; or

(d) when placing a fuel or supply cache within 100 m of any stream, place the fuel or supply cache below the normal high water mark of that stream.

Small Fuel Caches

11. Every person who establishes a fuel cache of more than 400 l and less than 4000 l on territorial land for which a permit is not required shall, within thirty days of the establishment thereof, notify the Engineer in writing, giving details of the cache including the amount and type of fuel, size of containers and method of storage and proposed date of removal of the cache.

g) l'utilisation, pour la prospection hydraulique, le terrassement et l'essartage, d'une machine fixe motorisée, autre qu'une scie mécanique; ou

h) le nivelage, le terrassement, l'essartage, l'excavation ou le débâlement de neige d'une ligne de levé, d'un sentier ou d'une servitude de passage d'une largeur de plus 1,5 mètre et d'une superficie de plus de 4 hectares.

9. Nul ne peut, sans un permis de catégorie B, entreprendre, sur des terres territoriales, un travail ou une activité impliquant

a) l'utilisation, au cours d'une période de trente jours, de plus de 50 kg d'explosifs, sans dépasser 150 kg;

b) l'utilisation, sauf sur une voie publique ou un sentier entretenu en totalité ou en partie à même les deniers publics, d'un véhicule de plus de 5 tonnes mais de moins de 10 tonnes ou l'utilisation d'un véhicule, exerçant sur le sol une pression supérieure à 35 k pa;

c) l'utilisation d'une machine motorisée de forage dont le poids durant les travaux est supérieur à 500 kg, mais inférieur à 2.5 tonnes, non compris le poids des tiges de forage ou des maîtresses-tiges, des trépans, des pompes et autres accessoires;

d) l'installation d'un campement destiné à l'utilisation de plus de deux personnes pour plus de 100 mais moins de 400 jours-hommes;

e) aux fins d'entreposage du combustible, la création d'installations ayant une capacité supérieure à 4 000 litres, mais inférieure à 80 000 litres ou l'utilisation d'un seul réservoir ayant une capacité supérieure à 2 000 litres, mais inférieure à 4 000; ou

f) le nivelage, le terrassement, l'essartage, l'excavation ou le débâlement de neige d'une ligne de levé, d'un sentier ou d'une servitude de passage d'une largeur de plus de 1,5 mètre et d'une superficie n'excédant pas 4 hectares.

10. Un détenteur de permis ne peut, sauf autorisation explicite du permis ou autorisation explicite écrite d'un inspecteur,

a) conduire une exploitation des terres à moins de 30 mètres d'une borne-signal connue, ou d'un gisement archéologique ou cimetière connu ou supposé;

b) de faire, à moins de 100 mètres d'un cours d'eau, sur des terres territoriales, des travaux d'excavation au-dessous du niveau normal de ses hautes eaux;

c) de déverser des déblais dans le lit d'un cours d'eau; ou

d) de déposer du combustible ou des fournitures dans une cache au-dessous du niveau normal des hautes eaux d'un cours d'eau lorsque la cache est à moins de 100 mètres de ce cours d'eau.

Cache de combustible de faible capacité

11. Une personne qui installe, sur des terres territoriales, une cache de combustible, dont la capacité est supérieure à 400 litres, mais inférieure à 4 000 litres et pour laquelle un permis n'est pas exigé en avisé par écrit l'ingénieur dans les trente jours, lui donnant les détails de la cache, y compris la quantité et le genre de combustible, la taille des réservoirs, la

méthode d'entreposage et la date prévue de l'enlèvement de la cache.

Excavation

12. Subject to the terms and conditions of his permit or the express written authority of an inspector, every permittee shall replace all materials removed by him in the course of excavating, other than rock trenching, and shall level and compact the area of the excavation.

Water Crossings

13. (1) Subject to the terms and conditions of his permit or the express written authority of an inspector, every permittee shall

- (a) remove any material or debris deposited in any stream in the course of a land use operation, whether for the purpose of constructing a crossing or otherwise, and
- (b) restore the channel and bed of the stream to their original alignment and cross-section,

prior to the completion of the land use operation or prior to the commencement of spring break-up, whichever occurs first.

(2) Subsection (1) shall not be deemed to permit any person to deposit any material or debris in a stream contrary to the *Northern Inland Waters Act* or the *Fisheries Act* or any regulations made under those Acts.

Clearing of Lines, Trails or Rights-of-Way

14. (1) Unless expressly authorized in a permit, no permittee shall

- (a) clear a new line, trail or right-of-way where there is an existing line, trail or right-of-way that he can use;
- (b) clear a line, trail or right-of-way wider than 10 m; or
- (c) while clearing a line, trail or right-of-way, leave leaners or debris in standing timber.

(2) Where, in the opinion of an inspector, serious erosion may result from a land use operation, the permittee shall adopt such measures to control erosion as may be required by the inspector.

Monuments

15. (1) Where a boundary monument is damaged, destroyed, moved or altered in the course of a land use operation, the permittee shall

- (a) report the fact immediately to the Surveyor General and pay to the Surveyor General the costs of
 - (i) investigating such damage, destruction, movement or alteration, and
 - (ii) restoring or re-establishing the monument to its original condition or its original place; or
- (b) with the prior written consent of the Surveyor General, cause the monument to be restored or re-established at his own expense.

Excavation

12. Sous réserve de son permis ou de l'autorisation explicite écrite d'un inspecteur, un détenteur de permis procéder à une excavation qui n'est pas un forage dans le roc comble l'excavation avec les déblais qu'il veille à niveler et tasser.

Passages d'eau

13. (1) Sous réserve de son permis ou de l'autorisation explicite écrite d'un inspecteur, un détenteur de permis

- a) enlève les matériaux ou débris déposés dans un cours d'eau lors de l'exploitation des terres, que ce soit pour la construction d'un passage ou autre, et
- b) remet le lit du cours d'eau dans son alignement et sa coupe transversale d'origine,

avant l'achèvement de l'exploitation des terres ou avant le début de la débâcle printanière, selon le premier événement.

(2) Le paragraphe (1) n'est pas réputé autoriser quiconque à déposer des matériaux ou débris dans un cours d'eau, en contravention de la *Loi sur les eaux intérieures du Nord*, de la *Loi sur les pêcheries* ou de leurs règlements respectifs.

Essartage de lignes de levé, de sentiers et de servitudes de passage

14. (1) Un détenteur de permis ne peut, sauf autorisation explicite de son permis,

- a) essarter une ligne de levé, un sentier ou une servitude de passage, s'il en est de praticables;
- b) essarter une ligne de levé, un sentier ou une servitude de passage d'une largeur supérieure à 10 mètres; ou
- c) laisser, lors de l'essartage d'une ligne de levé, d'un sentier ou d'une servitude de passage, des débris ou des arbres inclinés parmi du bois sur pied.

(2) Lorsqu'un inspecteur est d'avis que l'exploitation des terres pourrait causer une grave érosion, il peut imposer au détenteur de permis les mesures adéquates pour l'éviter.

Bornes-signaux

15. (1) Le détenteur de permis qui, au cours de l'exploitation des terres, endommage, détruit, déplace ou modifie une borne-signal de limite

- a) en informe immédiatement l'arpenteur en chef et lui paie les frais
 - (i) d'enquête sur les dommages, la destruction, le déplacement ou la modification, et
 - (ii) de remise de la borne-signal dans son état ou à son lieu d'origine; ou
- b) fait remettre, à ses frais et avec le consentement préalable et écrit de l'arpenteur en chef, la borne-signal dans son état ou à son lieu d'origine.

(2) Where a topographic or geodetic monument is damaged, destroyed or altered in the course of a land use operation, the permittee shall

(a) report the fact immediately to the Dominion Geodesist, and pay to the Dominion Geodesist the costs described in subparagraphs (1)(a)(i) and (ii); or

(b) with the prior written consent of the Dominion Geodesist, cause the monument to be restored or re-established at his own expense.

(3) The restoration or re-establishment of a monument pursuant to subsection (1) or (2) shall be carried out in accordance with instructions from the Surveyor General or Dominion Geodesist, as the case may be.

Archaeological Sites

16. Where, in the course of a land use operation, a suspected archaeological site or burial ground is unearthed or otherwise discovered, the permittee shall immediately

(a) suspend the land use operation on the site; and

(b) notify the Engineer or an inspector of the location of the site and the nature of any unearthed materials, structures or artifacts.

Campsites

17. (1) Subject to the terms and conditions of his permit, every permittee shall dispose of all garbage, waste and debris from any campsite used in connection with a land use operation by removal, burning or burial or by such other method as may be directed by an inspector.

(2) Sanitary sewage produced in connection with land use operations shall be disposed of in accordance with the Public Health Ordinance of the Northwest Territories or the Public Health Ordinance of the Yukon Territory, whichever is applicable, and any regulations made under the applicable Ordinance.

Restoration of Permit Area

18. Subject to the terms and conditions of his permit, every permittee shall, after completion of a land use operation, restore the permit area as nearly as possible to the same condition as it was prior to the commencement of the land use operation.

Removal of Buildings and Equipment

19. (1) Subject to subsections (2) and (3), every permittee shall, on completion of a land use operation, remove all buildings, machinery, equipment, materials and fuel drums or other storage containers used in connection with the land use operation.

(2) A permittee may, with the prior written approval of the Engineer, leave on territorial lands such buildings, equipment machinery and materials as the permittee deems may be required for future land use operations or other operations in the area, but any equipment, machinery or materials so left

(2) Le détenteur de permis qui, au cours de l'exploitation des terres, endommage, détruit, déplace ou modifie une borne-signal topographique ou géodésique

a) en informe immédiatement le géodésien fédéral et lui paie les frais visés aux sous-alinéas (1)a)(i) et (ii); ou

b) fait remettre, à ses frais et avec le consentement préalable et écrit du géodésien fédéral, la borne-signal dans son état ou à son lieu d'origine.

(3) La remise en état ou en place d'une borne-signal selon les paragraphes (1) et (2) est exécutée selon les directives de l'arpenteur en chef ou du géodésien fédéral, selon le cas.

Gisements archéologiques

16. Dès que, au cours d'une exploitation des terres, est soupçonnée l'exhumation ou la découverte d'un gisement archéologique ou d'un cimetière, le détenteur de permis

a) cesse l'exploitation des terres à cet endroit; et

b) avise l'ingénieur ou un inspecteur de l'emplacement du gisement et de la nature des matériaux, constructions ou objets exhumés.

Campements

17. (1) Sous réserve de son permis, un détenteur de permis qui a utilisé un campement pour une exploitation des terres, fait disparaître tous les déchets, rebuts et débris en les enlevant, en les brûlant, en les enterrant ou selon la méthode que peut imposer l'inspecteur.

(2) Les eaux-vannes résultant de l'exploitation des terres sont évacuées selon l'Ordonnance concernant l'hygiène publique des territoires du Nord-Ouest ou l'Ordonnance concernant l'hygiène publique du territoire du Yukon et leurs règlements respectifs.

Remise en état de la zone visée par un permis

18. A la fin de l'exploitation des terres et sous réserve de son permis, un détenteur de permis remet autant que possible la zone concernée dans son état initial.

Enlèvement des bâtiments et de l'équipement

19. (1) Sous réserve des paragraphes (2) et (3), un détenteur de permis enlève, à la fin de l'exploitation des terres, les bâtiments, la machinerie, les matériaux et les barils de combustible ou autres réservoirs d'entreposage utilisés pour l'exploitation.

(2) Un détenteur de permis peut, avec l'autorisation écrite et préalable de l'ingénieur, laisser sur des terres territoriales, les bâtiments, l'équipement, la machinerie et les matériaux qu'il juge indispensables pour une exploitation ultérieure des terres de la zone; dès lors, l'équipement, la machinerie et les maté-

shall be stored in a manner, at a location and for a duration approved by the Engineer.

(3) Subject to any applicable mining legislation, a permittee may, without the prior approval of the Engineer, leave diamond drill cores at a drill site on territorial lands.

Emergencies

20. Any person may, in an emergency that threatens life, property or natural environment, carry out such operation as he deems necessary to cope with the emergency, whether or not the operation is carried out in accordance with these Regulations or any permit that he may have and such person shall immediately thereafter send a written report to the Engineer describing the duration, nature and extent of the operation.

Eligibility for a Permit

21. In order to be eligible for a permit, a person shall

(a) where a right to search for, win or exploit minerals or natural resources is to be exercised by the carrying out of the land use operation authorized by the permit, be

(i) the holder of that right,

(ii) the manager of operations, where there is more than one holder of that right and such holders have entered into an exploration or operating agreement designating one of them as manager of operations, or

(iii) the person who contracts to have the land use operations carried out, where there is more than one holder of that right and they have not entered into an exploration or operating agreement designating one of them as manager of operations;

(b) where no right to search for, win or exploit minerals or natural resources is to be exercised by the carrying out of the land use operation authorized by the permit, be the person who contracts to have the land use operation carried out; or

(c) in any case not provided for in paragraph (a) or (b), be the person who is to carry out the land use operation.

Application for a Permit

22. (1) Any person who, in accordance with section 21, is eligible for a permit may submit to the Engineer, in duplicate, an application for a permit in a form approved by the Minister.

(2) Every application submitted pursuant to subsection (1) shall be accompanied by the applicable application fee and land use fee, if any, set out in the schedule and a preliminary plan showing

(a) the lands proposed to be used and an estimate of their area; and

(b) the approximate location of all

(i) existing lines, trails, rights-of-way and cleared areas proposed to be used in the land use operation,

(ii) new lines, trails, rights-of-way and cleared areas proposed to be used in the land use operation,

riaux ainsi laissés sont entreposés de la façon, à l'endroit et pour la durée qu'impose l'ingénieur.

(3) Sous réserve de toute législation minière applicable, un détenteur de permis peut laisser, sans l'approbation préalable de l'ingénieur, les carottes de foreuse à diamants dans une zone de forage des terres territoriales.

Urgences

20. Une personne peut, lors d'une urgence qui menace la vie, les biens ou l'environnement naturel, prendre les mesures qu'elle juge indispensables pour y faire face, que ces mesures soient conformes ou non à ce règlement ou au permis qu'elle détient et elle expédie sans délai à l'ingénieur un rapport écrit précisant la durée, la nature et l'étendue des mesures prises.

Éligibilité

21. Pour être éligible à un permis, une personne doit être

a) lorsque l'exploitation des terres autorisée par le permis a pour objet le droit de prospection, d'extraction ou d'exploitation des minéraux ou des ressources naturelles,

(i) le titulaire de ce droit,

(ii) s'il existe plusieurs titulaires et qu'ils ont conclu une convention d'exploration ou d'exploitation désignant l'un d'eux comme directeur des travaux, ce directeur, ou

(iii) s'il existe plusieurs titulaires et qu'ils n'ont pas conclu une telle convention, celui qui s'engage à faire exécuter l'exploitation des terres;

b) lorsque l'exploitation des terres autorisée par le permis n'a pas pour objet le droit de prospection, d'extraction ou d'exploitation des minéraux ou des ressources naturelles, celui qui s'engage à faire exécuter l'exploitation des terres;

c) dans tous les autres cas, celui qui doit exécuter l'exploitation des terres.

Demande de permis

22. (1) Une personne éligible à un permis selon l'article 21 peut présenter, en double exemplaire, à l'ingénieur une demande de permis en la forme approuvée par le Ministre.

(2) La demande de permis présentée selon le paragraphe (1) est accompagnée du droit applicable à la demande et, s'il y a lieu, du droit d'utilisation des terres visé à l'annexe, ainsi que d'un plan provisoire indiquant

a) les terres que le requérant se propose d'utiliser et leur superficie estimative; et

b) l'emplacement approximatif

(i) des lignes de levé, sentiers, servitudes de passage et zones essartées en existence que le requérant se propose d'utiliser lors de l'exploitation des terres,

(iii) buildings, campsites, air landing strips, air navigation aids, fuel and supply storage sites, waste disposal sites, excavations and other works and places proposed to be constructed or used during the land use operation, and
 (iv) bridges, dams, ditches, railroads, highways and roads, transmission lines, pipelines, survey lines and monuments, air landing strips, streams and all other features, structures or works that, in the opinion of the applicant, may be affected by the land use operation.

(ii) des nouvelles lignes de levé, nouveaux sentiers, nouvelles servitudes de passage et nouvelles zones essartées que le requérant se propose d'utiliser lors de l'exploitation des terres,

(iii) des bâtiments, campements, pistes d'atterrissement, aides à la navigation aérienne, endroits d'entreposage des combustibles et fournitures, dépôts, excavations et autres travaux et endroits que le requérant se propose d'aménager ou d'utiliser lors de l'exploitation des terres, et

(iv) des ponts, barrages, fossés, voies ferrées, routes, chemins, lignes de transmission, pipe-lines, lignes de levé et bornes-signaux, pistes d'atterrissement, cours d'eau et autres éléments, structures ou travaux pouvant, de l'avis du requérant, être affectés par l'exploitation des terres.

(3) For the purpose of calculating the land use fee payable where territorial lands are proposed to be used for a line, trail or right-of-way, the width of the line, trail or right-of-way shall, unless otherwise specified by the Engineer in the permit, be deemed to be 10 m.

23. (1) The Engineer may, before issuing a permit,
 (a) order an inspection of the lands proposed to be used thereunder; and
 (b) require an applicant for a permit to provide him with such information and data concerning the proposed use of the lands and the physical and biological characteristics thereof as will enable the Engineer to evaluate any quantitative and qualitative effects of the proposed land use operation.

(2) Where an inspector makes an inspection pursuant to an order of the Engineer under paragraph (1)(a), he shall investigate and report to the Engineer particulars of

(a) the existing biological and physical characteristics of the lands proposed to be used and the surrounding lands;
 (b) any disturbance that the proposed land use operation may cause on the lands proposed to be used and the surrounding lands and the biological characteristics thereof; and
 (c) the manner in which the disturbance referred to in paragraph (b) may be minimized and controlled.

(3) The Engineer may, where he deems it necessary or when requested to do so by an applicant, inform the applicant of the nature of an inspector's report referred to in subsection (2).

24. Where the Engineer receives an application for a Class A Permit that is not made in accordance with these Regulations, he shall, within ten days thereafter, notify the applicant in writing that his application cannot be accepted and give the reasons therefor.

25. (1) The Engineer shall, within ten days after receipt of an application for a Class A Permit made in accordance with these Regulations,

(a) issue a Class A Permit subject to any terms and conditions he may include therein pursuant to subsection 31(1);
 (b) notify the applicant that further time is required to issue a permit and give the reasons therefor;

(c) notify the applicant in writing that he has ordered further studies or investigations to be made respecting the lands proposed to be used and state the reasons therefor; or
 (d) refuse to issue a permit and notify the applicant in writing of his refusal and the reasons therefor.

(2) Where the Engineer has notified an applicant that further time is required to issue a permit pursuant to paragraph (1)(b), he shall, within forty-two days after the date of receipt of the application, comply with paragraph (1)(a), (c) or (d).

(3) Where the Engineer has notified an applicant that he has ordered further studies or investigations to be made pursuant to paragraph (1)(c), he shall, within twelve months after the date of receipt of the application, comply with paragraph (1)(a) or (d).

26. Where the Engineer receives an application for a Class B Permit that is not made in accordance with these Regulations, he shall, within three days thereafter, notify the applicant in writing that his application cannot be accepted and give the reasons therefor.

27. The Engineer shall, within ten days after receipt of an application for a Class B Permit made in accordance with these Regulations,

- (a) issue a Class B Permit subject to any terms and conditions he may include therein pursuant to subsection 31(1); or
- (b) refuse to issue a permit and notify the applicant in writing of his refusal and the reasons therefor.

28. The Engineer may, where he deems it necessary, notify an applicant in writing that his application for a Class B Permit will be considered as an application for a Class A Permit.

29. The Engineer shall assign a number to each permit.

Display of Permit

30. Every permittee engaged in a work or an undertaking authorized by a permit shall display

- (a) an exact copy of the permit, including the conditions thereof, in such manner and at such places as the Engineer may require; and
- (b) the number assigned to the permit on such articles and equipment, in such manner and at such places as the Engineer may require.

Terms and Conditions of Permits

31. (1) The Engineer may include in any permit terms and conditions respecting

- (a) the location and the area of territorial lands that may be used;
- (b) the times at which any work or undertaking may be carried on;
- (c) the type and size of equipment that may be used in the land use operation;

c) donne au requérant un avis écrit et motivé à l'effet qu'il a ordonné des études ou enquêtes supplémentaires sur les terres dont l'utilisation est envisagée; ou
 d) donne au requérant un avis écrit et motivé du rejet de la demande de permis.

(2) Lorsque l'ingénieur a, selon l'alinéa (1)b), avisé le requérant du délai supplémentaire requis pour la délivrance du permis, il se conforme aux alinéas 1(a), c) ou d), dans les quarante-deux jours de la réception de la demande.

(3) Lorsque l'ingénieur a, selon l'alinéa (1)c), avisé le requérant qu'il a ordonné des études ou enquêtes supplémentaires, il se conforme aux alinéas (1)a) ou d), dans les douze mois de la réception de la demande.

26. Dans les trois jours de la réception d'une demande de permis de catégorie B non conforme à ce règlement, l'ingénieur donne au requérant un avis écrit et motivé du rejet de sa demande.

27. Dans les dix jours de la réception d'une demande de permis de catégorie B conforme à ce règlement, l'ingénieur

- a) délivre le permis sous réserve des conditions qu'il peut y énoncer, selon le paragraphe 31(1); ou
- b) donne au requérant un avis écrit et motivé du rejet de la demande de permis.

28. L'ingénieur peut, lorsqu'il le juge nécessaire, aviser le requérant par écrit que sa demande de permis de catégorie B sera considérée comme une demande de permis de catégorie A.

29. L'ingénieur attribue un numéro à chaque permis.

Affichage du permis

30. Un détenteur de permis effectuant un travail ou une activité autorisée par le permis affiche

- a) une copie conforme du permis et de ses conditions, de la façon et aux endroits prescrits par l'ingénieur; et
- b) le numéro du permis sur les articles et l'équipement, de la façon et aux endroits prescrits par l'ingénieur.

Conditions des permis

31. (1) L'ingénieur peut énoncer dans un permis des conditions concernant

- a) l'emplacement et la superficie des terres territoriales pouvant être utilisées;
- b) les périodes au cours desquelles un travail ou une activité peut être exécutée;
- c) le genre et la taille de l'équipement pouvant être employé lors de l'exploitation des terres;

(d) the methods and techniques to be employed by the permittee in carrying out the land use operation;

(e) the type, location, capacity and operation of all facilities to be used by the permittee in the land use operation;

(f) the methods of controlling or preventing ponding of water, flooding, erosion, slides and subsidences of land;

(g) the use, storage, handling and ultimate disposal of any chemical or toxic material to be used in the land use operation;

(h) the protection of wildlife and fisheries habitat;

(i) the protection of objects and places of recreational, scenic and ecological value;

(j) the deposit of security in accordance with section 36;

(k) the establishment of petroleum fuel storage facilities;

(l) the methods and techniques for debris and brush disposal; and

(m) such other matters not inconsistent with these Regulations as the Engineer thinks necessary for the protection of the biological or physical characteristics of the land management zone.

d) les méthodes et techniques que doit employer le détenteur de permis lors de l'exploitation des terres;

e) le genre, l'emplacement, la capacité et le fonctionnement de toutes les installations que doit utiliser le détenteur de permis lors de l'exploitation des terres;

f) les mesures préventives contre l'accumulation d'eau, l'inondation, l'érosion, les glissements et les affaissements de terrain;

g) l'emploi, l'entreposage, la manipulation et l'élimination des matières chimiques ou toxiques, qui doivent être utilisées au cours de l'exploitation des terres;

h) la protection de la faune terrestre et aquatique;

i) la protection des objets et lieux qui ont une valeur récréative, panoramique et écologique;

j) le dépôt d'une garantie selon l'article 36;

k) la mise sur pied d'installations pour l'entreposage du combustible;

l) les méthodes et techniques pour disposer des débris et broussailles; et

m) d'autres matières, compatibles avec ce règlement, que l'ingénieur juge nécessaires à la protection des caractéristiques physiques et biologiques de la zone de gestion des terres.

(2) The Engineer may modify any of the terms or conditions included in a permit on receipt of a written request from the permittee that sets out

(a) the terms or conditions in the permit that the permittee wishes modified; and

(b) the nature of the modification proposed and the reasons therefor.

(3) Where the Engineer receives a written request from a permittee pursuant to subsection (2), he shall notify the permittee of his decision and the reasons therefor within 10 days of receipt of the request.

(4) Every permit shall set out the period for which it is valid and such period shall be based on the estimated dates of commencement and completion as set out by the permittee in his application, but in no case shall a permit be valid for a period exceeding two years.

(5) On receipt of a written request from a permittee for an extension of the duration of his permit, the Engineer may extend the duration of the permit subject to such conditions not inconsistent with these Regulations as he thinks fit, for such period, not exceeding one year, as he thinks necessary to enable the permittee to complete the land use operation authorized by the permit.

Reports

32. Every permittee shall submit to the inspector or Engineer, in a form and on a date satisfactory to the inspector or Engineer, such reports as are requested by the inspector or Engineer, in order to ascertain the progress of the land use operation.

(2) L'ingénieur peut modifier les conditions d'un permis sur réception d'une demande écrite du détenteur, énonçant

a) les conditions du permis que le détenteur désire faire modifier; et

b) la nature et le motif du changement proposé.

(3) Dans les dix jours de la réception de la demande visée au paragraphe (2), l'ingénieur donne au détenteur de permis un avis motivé de sa décision.

(4) Le permis indique sa période de validité n'excédant pas deux ans et fixée d'après les dates prévues dans la demande de permis pour le commencement et la fin des travaux.

(5) Sur réception d'une demande écrite d'un détenteur de permis pour la prolongation de la durée de validité de son permis, l'ingénieur peut, sous réserve des conditions qu'il juge à propos et non incompatibles avec ce règlement, accorder la prolongation, n'excédant pas un an, qu'il juge nécessaire à l'achèvement de l'exploitation des terres autorisée par le permis.

Rapports

32. Le détenteur de permis présente à l'inspecteur ou à l'ingénieur, dans la forme et aux dates qu'ils jugent satisfaisantes, les rapports qu'ils demandent afin de s'enquérir de l'avancement de l'exploitation des terres.

Final Plan

33. (1) Every permittee shall, within sixty days after the completion of a land use operation or the expiry of his permit, whichever occurs first, submit a final plan in duplicate to the Engineer showing

- (a) the lands actually subjected to the land use operation;
- (b) the location of
 - (i) lines, trails, rights-of-way and cleared areas that were used by the permittee during the land use operation, specifying those that were cleared by the permittee and those that existed before the land use operation began,
 - (ii) buildings, campsites, air landing strips, air navigation aids, fuel and supply storage sites, waste disposal sites, excavations and other works and places that were constructed or used by the permittee during the land use operation, and
 - (iii) bridges, dams, ditches, railroads, highways and roads, transmission lines, pipelines, survey lines and monuments, air landing strips, streams and all other features, structures or works that were affected by the land use operation; and
- (c) the calculations of the area of territorial lands used in the operation.

(2) The final plan submitted to the Engineer pursuant to subsection (1) shall be

- (a) certified by the permittee or his agent authorized for the purpose as to the accuracy of
 - (i) locations, distances and areas, and
 - (ii) the representation of the land use operation; or
- (b) drawn from and accompanied by positive prints of vertical aerial photographs or aerial photomosaics showing the lands subjected to the land use operation.

(3) On receipt of a written request from a permittee for an extension of the time for filing a final plan, the Engineer may extend the time for filing the final plan by not more than sixty days.

(4) The Engineer shall reject the final plan if it does not comply with this section and section 35 and the permittee shall, within three weeks after receipt of written notice from the Engineer of rejection of the plan, submit to the Engineer another final plan that complies with this section and section 35.

(5) Notwithstanding the expiry of a permit or the submission of a final plan, every permittee remains responsible for his obligations arising under the terms and conditions of the permit or under these Regulations until such time as the Engineer issues a letter of clearance for the land use operation.

Determination of Land Use Fee

34. (1) Within thirty days after the Engineer has issued a letter of clearance, the permittee shall calculate the land use fee payable based on the actual area of land used in the operation and the Engineer shall

Plan définitif

33. (1) Dans les soixante jours de l'achèvement de l'exploitation des terres ou de la date d'expiration de son permis, selon la première éventualité, le détenteur de permis présente à l'ingénieur un plan définitif, en double exemplaire, indiquant

- a) les terres effectivement sujettes à l'exploitation;
- b) l'emplacement
 - (i) des lignes de levé, sentiers, servitudes de passage et zones essartées que le détenteur a utilisés au cours de l'exploitation des terres, en précisant ceux qu'il a lui-même essartés et ceux qui existaient déjà au début de l'exploitation,
 - (ii) des bâtiments, campements, pistes d'atterrissement, aides à la navigation aérienne, endroits d'entreposage des combustibles et des fournitures, dépotoirs, excavations et autres travaux ou endroits que le détenteur a utilisés ou aménagés au cours de l'exploitation des terres, et
 - (iii) des ponts, barrages, fossés, voies ferrées, routes, chemins, lignes de transmission, pipe-lines, lignes de levé et bornes-signaux, pistes d'atterrissement, cours d'eau et autres éléments, structures ou travaux affectés par l'exploitation des terres; et
- c) les calculs de la superficie des terres territoriales utilisées dans l'exploitation.

(2) Le plan définitif présenté à l'ingénieur selon le paragraphe (1) est

- a) certifié par le détenteur du permis ou son mandataire autorisé à cette fin, quant à l'exactitude
 - (i) des emplacements, distances et superficies, et
 - (ii) de la description de l'exploitation des terres; ou
- b) tiré et accompagné de clichés positifs de photographies aériennes verticales, montrant les terres sujettes à l'exploitation.

(3) L'ingénieur peut proroger d'au plus soixante jours le délai fixé pour la présentation du plan définitif, s'il reçoit une demande écrite en ce sens, d'un détenteur de permis.

(4) L'ingénieur rejette un plan définitif non conforme à cet article et à l'article 35 et, dans les trois semaines de la réception d'un avis écrit de l'ingénieur à cet effet, le détenteur de permis lui soumet un nouveau plan définitif conforme à cet article et à l'article 35.

(5) Nonobstant l'expiration d'un permis ou la présentation d'un plan définitif, le détenteur de permis est tenu de satisfaire aux obligations énoncées dans le permis ou dans ce règlement jusqu'au moment où l'ingénieur lui délivre une lettre d'acquittement relative à l'exploitation des terres.

Établissement du droit d'utilisation des terres

34. (1) Dans les trente jours de la délivrance par l'ingénieur d'une lettre d'acquittement, le détenteur de permis calcule le droit d'utilisation des terres d'après la superficie réelle des terres utilisées et l'ingénieur,

(a) where the land use fee submitted with the application is greater than the fee so calculated, refund the excess to the permittee; or

(b) where the land use fee submitted with the application is less than the fee so calculated, demand, by notice in writing to the permittee, payment of the deficiency.

(2) Where an application for a permit is refused, the land use fee submitted with the application shall be refunded to the applicant.

(3) No application fee shall be refunded.

Land Division and Plans

35. Every preliminary plan or final plan submitted under these Regulations shall

(a) be drawn to a scale that clearly shows the lands that the applicant for a permit proposes to use or the permittee has used;

(b) show the scale to which the plan is drawn; and

(c) show locations

(i) in accordance with sections 5 to 9 of the *Canada Oil and Gas Land Regulations*, or

(ii) by giving the geographic co-ordinates thereof.

Security Deposit

36. (1) In order to ensure that a permittee complies with the terms and conditions of his permit and with these Regulations, the Engineer may include in the permit a condition that the permittee deposit with the Minister a security deposit not exceeding \$100,000.

(2) Where a permit includes a condition requiring a security deposit, the permittee shall not begin the land use operation until a security deposit has been deposited with the Minister.

(3) A security deposit shall be in the form of

(a) a promissory note guaranteed by a chartered bank and payable to the Receiver General;

(b) a certified cheque drawn on a chartered bank in Canada and payable to the Receiver General;

(c) bearer bonds issued or guaranteed by the Government of Canada; or

(d) a combination of the securities described in paragraphs (a) to (c).

(4) A security deposit shall be returned by the Minister when the Engineer has issued a letter of clearance in respect of the land use operation.

(5) Where a permittee has not complied with all the terms and conditions of his permit or with these Regulations, the Minister may retain such part of a security deposit as, in his opinion, the circumstances justify.

(6) Where the Minister retains all or part of a security deposit, the Minister may use all or part of the security deposit forfeited to repair or restore the land that has been damaged as a result of the land use operation.

a) lorsque le droit d'utilisation joint à la demande de permis dépasse le montant du droit ainsi calculé, rembourse le détenteur de permis du montant excédentaire; ou

b) lorsque le droit d'utilisation joint à la demande de permis est moindre que le montant du droit ainsi calculé, réclame, par un avis écrit au détenteur de permis, le montant de la différence.

(2) Lorsqu'une demande de permis est rejetée, le droit d'utilisation est remboursé au requérant.

(3) Le droit exigé pour la demande n'est pas remboursable.

Division des terres et plans

35. Un plan provisoire ou définitif présenté selon ce règlement

a) est établi à une échelle indiquant clairement les terres que le requérant d'un permis se propose d'utiliser ou que le détenteur de permis a utilisées;

b) indique l'échelle du plan; et

c) indique les emplacements

(i) selon les articles 5 à 9 du *Règlement sur les terres pétrolières et gazifères du Canada*, ou

(ii) en donnant leurs coordonnées géographiques.

Dépôt de garantie

36. (1) Pour s'assurer que le détenteur de permis se conforme aux conditions de son permis et à ce règlement, l'ingénieur peut imposer comme condition qu'il dépose auprès du Ministre une garantie n'excédant pas \$100,000.

(2) Un détenteur de permis ne peut commencer l'exploitation des terres avant d'avoir déposé auprès du Ministre la garantie que le permis exige.

(3) Le dépôt d'une garantie se fait sous forme

a) de billet à ordre garanti par une banque à charte et payable au receveur général;

b) de chèque visé tiré sur une banque à charte canadienne et payable au receveur général;

c) d'obligations au porteur émises ou garanties par le gouvernement du Canada; ou

d) d'une combinaison des garanties décrites au alinéas a) à c).

(4) Le Ministre rembourse le dépôt de garantie lorsque l'ingénieur a délivré une lettre d'acquittement relative à l'exploitation des terres.

(5) Lorsqu'un détenteur de permis ne s'est pas conformé à toutes les conditions de son permis ou à ce règlement, le Ministre peut retenir la partie du dépôt de garantie qu'il croit justifiée dans les circonstances.

(6) Lorsque le Ministre retient, en totalité ou en partie, le dépôt de garantie, il peut l'utiliser pour remettre en bon état le terrain endommagé par l'exploitation des terres.

Letter of Clearance

37. When the Engineer is satisfied that a permittee has complied with all the terms and conditions of his permit and with the provisions of these Regulations, he shall issue a letter of clearance to the permittee.

Duties and Powers of Inspectors

38. (1) It shall be a condition of every permit that the permittee shall permit an inspector, at any reasonable time, to enter any place or premises on territorial lands under the permittee's ownership or occupation, other than a private dwelling, and make such inspections as he thinks necessary to determine whether the terms and conditions of the permit or the provisions of these Regulations are being complied with.

(2) An inspector shall be furnished with a certificate of his appointment as an inspector and on entering any place or premises under subsection (1) shall, if so requested, produce the certificate.

(3) Every person in any place or premises entered by an inspector under subsection (1) shall give the inspector such assistance and furnish him with such information as the inspector may, for the purpose of carrying out his duties under these Regulations, reasonably require.

39. No person shall wilfully obstruct or hinder an inspector in carrying out his duties under these Regulations.

40. No person shall knowingly make a false or misleading statement either orally or in writing to an inspector engaged in carrying out his duties under these Regulations.

Suspension of a Land Use Operation

41. (1) Where an inspector is of the opinion that a permittee has failed to comply with any term or condition of his permit or any provision of these Regulations, he shall so inform the permittee and, if the default continues, the inspector may give notice to the permittee that if the default is not corrected within the time specified in the notice the inspector may order the suspension of the land use operation or any part thereof.

(2) If a permittee does not correct a default within the time specified in a notice given by an inspector under subsection (1), the inspector may order the permittee to suspend the land use operation or any part thereof and the permittee shall thereupon suspend the land use operation or part thereof until the inspector authorizes the permittee to resume the land use operation.

(3) An inspector shall authorize a permittee to resume a land use operation or part thereof suspended under subsection (2) when the inspector or the Engineer is satisfied that the default has been corrected, unless the permit has in the meantime been cancelled pursuant to section 42.

(4) Where a permittee has been informed of a default pursuant to subsection (1) or an order has been made in respect thereof pursuant to subsection (2), the Engineer may, if the permittee fails to correct the default, take such action as he deems necessary to correct the default.

Lettre d'acquittement

37. Lorsque l'ingénieur est convaincu que le détenteur de permis s'est conformé aux conditions de son permis et à ce règlement, il lui délivre une lettre d'acquittement.

Fonctions et pouvoirs de l'inspecteur

38. (1) Tout permis est sujet au droit d'un inspecteur de pénétrer, à tout moment raisonnable, en un lieu ou dans des locaux situés sur des terres territoriales et dont le détenteur de permis est l'occupant ou le propriétaire, sauf dans une habitation particulière, et de faire les inspections qu'il juge nécessaires pour déterminer si les conditions du permis ou les dispositions de ce règlement sont respectées.

(2) Un inspecteur est pourvu du certificat de sa nomination comme inspecteur et il l'exhibe sur demande lorsqu'il pénètre en un lieu ou dans des locaux selon le paragraphe (1).

(3) Une personne présente en un lieu ou dans des locaux visités par un inspecteur selon le paragraphe (1) lui fournit l'aide et les renseignements qu'il peut raisonnablement exiger pour exécuter ses fonctions selon ce règlement.

39. Nul ne peut nuire volontairement à un inspecteur dans l'exécution de ses fonctions selon ce règlement.

40. Nul ne peut faire verbalement ou par écrit une déclaration fausse ou trompeuse à un inspecteur exécutant ses fonctions selon ce règlement.

Suspension de l'exploitation des terres

41. (1) Lorsqu'un inspecteur est d'avis qu'un détenteur de permis ne s'est pas conformé à une condition de son permis ou à une disposition de ce règlement, il en informe le détenteur de permis et, si le manquement persiste, il peut l'aviser qu'à défaut de conformité dans le délai précisé dans l'avis, il peut suspendre une partie ou la totalité de l'exploitation des terres.

(2) Si le détenteur de permis ne se conforme pas dans le délai précisé dans l'avis donné par un inspecteur selon le paragraphe (1), l'inspecteur peut lui ordonner de suspendre une partie ou la totalité de l'exploitation des terres, et le détenteur de permis cesse alors l'exploitation jusqu'à ce que l'inspecteur l'autorise à la reprendre.

(3) L'inspecteur autorise un détenteur de permis à reprendre l'exploitation des terres suspendue selon le paragraphe (2) lorsque lui-même ou l'ingénieur s'est assuré de la correction du défaut, à moins que le permis n'ait été annulé entre temps selon l'article 42.

(4) Si, après avis d'un défaut selon le paragraphe (1) ou réception d'un ordre selon le paragraphe (2), le détenteur de permis n'a pas remédié à la situation, l'ingénieur peut prendre les mesures qu'il juge nécessaires pour y satisfaire.

(5) The costs of any action taken by the Engineer pursuant to subsection (4) may be recovered from the permittee as a debt due to the Crown.

(6) Nothing in this section relieves a permittee from prosecution for any violation of these Regulations.

(7) No order pursuant to subsection (2) shall be made in respect of an oil or gas drilling site between the time of spud-in and the rig release date without the concurrence of the district oil and gas conservation engineer.

Cancellation of Permit

42. (1) Where a land use operation has been suspended pursuant to section 41 and the permittee fails or refuses to correct his default in complying with any terms and conditions of a permit or of any provision of these Regulations, the Engineer may cancel the permit.

(2) The cancellation of a permit under subsection (1) shall not relieve the permittee from any obligation arising under the terms and conditions of the permit or under these Regulations, or from complying with any notice, direction or order given by an inspector or by the Engineer.

Discontinuance of a Land Use Operation

43. (1) Subject to subsection (2), where a permittee wishes to discontinue a land use operation at any time prior to the date of completion set out in the permit, he shall give notice of discontinuance in writing to the Engineer indicating the date upon which he proposes to discontinue the land use operation.

(2) A notice of discontinuance given pursuant to subsection (1) shall be given to the Engineer at least ten days prior to the proposed date of the discontinuance.

(3) On receipt of a notice of discontinuance, the Engineer shall amend a copy of the permit accordingly and shall forward the amended copy of the permit to the permittee.

(4) The discontinuance of a land use operation pursuant to this section does not relieve the permittee from any obligations arising under the terms and conditions of the permit or under these Regulations up to the time of discontinuance or from complying with any notice, direction or order given by an inspector or by the Engineer.

Assignment

44. (1) On receipt of an application in writing for approval of an assignment of a permit, the Engineer may approve the assignment in whole or in part.

(2) An application for approval of an assignment shall be forwarded to the Engineer at least ten days prior to the proposed effective date of the assignment and shall include the permit number of the assignor, the name and address of the proposed assignee and particulars of the interests or rights of the assignee to be benefited by the assignment of the permit.

(5) Les frais des mesures prises par l'ingénieur selon le paragraphe (4) peuvent être recouvrés du détenteur de permis à titre de créance de la Couronne.

(6) Aucune disposition de cet article ne relève un détenteur de permis des poursuites dont il est possible pour violation de ce règlement.

(7) S'il s'agit du forage d'un puits de pétrole ou de gaz, aucun ordre visé au paragraphe (2) ne peut être donné entre la percée de forage et le renvoi de l'équipe, sans l'accord de l'ingénieur de district pour la conservation du pétrole et du gaz.

Annulation du permis

42. (1) Lorsque l'exploitation des terres a été suspendue selon l'article 41 et que le détenteur de permis néglige ou refuse de remédier à son défaut de se conformer aux conditions du permis ou à ce règlement, l'ingénieur peut annuler le permis.

(2) L'annulation d'un permis selon le paragraphe (1) ne dégage pas le détenteur de permis de ses obligations découlant du permis ou de ce règlement, ni de l'obligation de se conformer à un avis, à une directive ou à un ordre reçu d'un inspecteur ou de l'ingénieur.

Cessation d'un travail d'utilisation des terres

43. (1) Sous réserve du paragraphe (2), le détenteur de permis qui désire cesser l'exploitation des terres avant la date d'achèvement visée dans le permis, en donne à l'ingénieur un avis écrit, et lui indique la date prévue de la cessation.

(2) L'avis de cessation donné selon le paragraphe (1) est donné à l'ingénieur au moins dix jours avant la date prévue de la cessation.

(3) Sur réception de l'avis de cessation, l'ingénieur modifie une copie du permis en conséquence et la transmet au détenteur de permis.

(4) La cessation de l'exploitation des terres, selon cet article, ne dégage pas le détenteur de permis de ses obligations découlant du permis ou de ce règlement, jusqu'à la date de cessation, ni de l'obligation de se conformer à un avis, à une directive ou à un ordre reçu d'un inspecteur ou de l'ingénieur.

Cession

44. (1) L'ingénieur peut approuver, en tout ou en partie, une demande écrite d'approbation de la cession d'un permis.

(2) La demande d'approbation de la cession est transmise à l'ingénieur au moins dix jours avant la date prévue de la cession et indique le numéro de permis du cédant, les nom et adresse du cessionnaire et les détails des intérêts ou droits dévolus au cessionnaire par suite de la cession.

Appeals

45. (1) An applicant for a permit or a permittee may, within thirty days after any decision, direction or order made by the Engineer or an inspector, appeal therefrom to the Minister.

(2) An appeal referred to in subsection (1) shall be by notice in writing setting forth

- (a) the decision, direction or order appealed from;
- (b) the relevant circumstances surrounding the giving of the decision, direction or order; and
- (c) the grounds of the appeal.

(3) A person appealing to the Minister pursuant to subsection (1) shall provide the Minister with such further particulars with respect to the appeal as the Minister may require.

(4) The Minister may, after receipt of an appeal pursuant to subsection (1), set aside, confirm or vary the decision, direction or order appealed from or may remit it to the Engineer for reconsideration with such instructions as the Minister deems proper.

(5) A decision, direction or order appealed from remains in full force and effect pending the decision of the Minister or an officer appointed by him pursuant to subsection (6).

(6) The Minister may authorize a senior officer of the Department of Indian Affairs and Northern Development, other than the Engineer, to exercise the Minister's powers in respect of any appeal pursuant to this section.

Notice

46. (1) Any direction, notice or order given to a permittee under these Regulations shall be sufficiently given if sent by registered mail to, or left at, the permittee's address as stated in his application for the permit and shall be deemed to have been given to the permittee on the date it was so mailed or left.

(2) Where a direction, notice or order is given to a permittee other than in writing, it shall forthwith be confirmed in writing.

SCHEDULE*Fees Payable for a Permit***1. Application fee**

(a) Class A Permit \$20

(b) Class B Permit \$10

2. Land use fee where lands proposed to be used as shown on the preliminary plan exceed 2 ha, for each ha of land in excess of 2 ha

(a) \$20, south of the 65th parallel of north latitude; and
(b) \$12, north of the 65th parallel of north latitude.

Appels

45. (1) Le requérant d'un permis ou le détenteur de permis peut, dans les trente jours de la date d'une décision, d'une directive ou d'un ordre, reçus de l'ingénieur ou d'un inspecteur, en appeler au Ministre.

(2) L'appel visé au paragraphe (1) se fait par avis écrit exposant

- a) la décision, la directive ou l'ordre faisant l'objet de l'appel;
- b) les circonstances pertinentes ayant suscité la décision, la directive ou l'ordre; et
- c) les motifs de l'appel.

(3) Quiconque interjette appel au Ministre selon le paragraphe (1) lui fournit les détails supplémentaires pertinents qu'il peut exiger.

(4) Le Ministre peut, après réception d'un appel selon le paragraphe (1), annuler, confirmer ou modifier la décision, la directive ou l'ordre faisant l'objet de l'appel ou le renvoyer à l'ingénieur pour révision avec les directives qu'il juge à propos.

(5) Une décision, une directive ou un ordre faisant l'objet d'un appel reste en vigueur jusqu'à la décision du Ministre ou du fonctionnaire nommé par lui selon le paragraphe (6).

(6) Le Ministre peut autoriser un haut fonctionnaire du ministère des Affaires indiennes et du Nord canadien, sauf l'ingénieur, à exercer les pouvoirs du Ministre concernant un appel selon cet article.

Avis

46. (1) Une directive, un avis ou un ordre donné à un détenteur de permis selon ce règlement est valablement donné s'il a été expédié sous pli recommandé ou déposé à l'adresse que le détenteur de permis a déclarée dans sa demande de permis et il est censé avoir été donné au détenteur à la date de son expédition ou de son dépôt.

(2) Une directive, un avis ou un ordre donné verbalement à un détenteur de permis est immédiatement confirmé par écrit.

ANNEXE*Droits payables pour un permis***1. Droit de demande de permis**

a) permis de catégorie A \$20

b) permis de catégorie B \$10

2. Lorsque les terres qu'on envisage d'utiliser selon le plan provisoire ont une superficie de plus de 2 hectares, pour chaque hectare supplémentaire, un droit d'utilisation

a) de \$20, au sud du 65^e parallèle de latitude nord; et
b) de \$12, au nord du 65^e parallèle de latitude nord.

APPENDIX II

In March 1972 the Minister of Indian Affairs and Northern Development outlined the Policy of the Government for Northern Canada in the 1970's. This policy included the following national objectives in the North:

1. to provide for a higher standard of living, quality of life and equality of opportunity for northern residents by methods which are compatible with their own preferences and aspirations;
2. to maintain and enhance the northern environment with due consideration to economic and social development;
3. to encourage viable economic development within regions of the Northern Territories so as to realize their potential contribution to the national economy and the material well-being of Canadians;
4. to realize the potential contribution of the Northern Territories to the social and cultural development of Canada;
5. to further the evolution of self-government in the Northern Territories;
6. to maintain Canadian sovereignty and security in the North; and
7. to develop fully the leisure and recreational opportunities in Northern Territories.

APPENDIX III

ADVISORY COMMITTEE ON NORTHERN DEVELOPMENT¹

In order to provide a mechanism for interdepartmental planning and coordination of federal policies and programs related to the Canadian north, there is an Advisory Committee on Northern Development, chaired by an officer of the Department of Indian Affairs and Northern Development.

By means of a number of special committees and working groups, the Advisory Committee carries out its work and reports to the Minister of DIAND. The principal committees are: policy committee; general committee (meets two or three times per year); transportaiton committee; committee on science and technology; committee on northern communications; committee on the employment of native northerners; federal-territorial economic planning committee; advisory committee on industrial benefits from natural resource development; federal interdepartmental coordinating committee - Yukon (chaired by the Commissioner, comprised of senior officials of each federal department resident in Yukon); interdepartmental advisory committee on northern roads.

In addition to the foregoing, working groups, reporting to the principal committees, are established as required to deal with specific tasks.

¹ Based primarily on Department of Indian Affairs and Northern Development, 1976-1977 Government Activities in the North, p. 9.

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